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IDA PAPER P-2966

TRAINING REQUIREMENTS OF TWO
ARMY NATIONAL GUARD BRIGADES

John Metzko

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June 1994

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FOREWORD

The results of the study effort reported herein have already been used by the Advanced Systems Technology Office of the Advanced Research Projects Agency (ARPA) to make courseware development decisions. The courseware will be used to deliver training to two Army National Guard (ARNG) brigades under ARPA's SIMITAR (Simulation in Training for Advanced Readiness) program, whose goal is to demonstrate the effectiveness and affordability of advanced distributed training technologies.

In developing training requirements for the ARNG brigades studied in this investigation, personnel records were extracted from the July 1993 Standard Installation/Division Personnel System (SIDPERS) database to determine the training status of personnel in the ARNG brigades of interest. These records use Social Security numbers as identifiers, and concern for privacy precludes their inclusion in this report. A SIDPER-extract file tape can be made available to any interested agency authorized by ARPA, the study sponsor, and the ARNG to receive it.

Extracts of July 1993 tables of organization and equipment (TOE) were obtained from an ARNG database to identify MOSs and grade levels required by, authorized for, and assigned to the brigades of interest. While TOE strength data related to MOSs and grade levels are shown in this report, neither TOE nor TOE extracts are included.

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PREFACE

The material reported herein has been prepared for Colonel Steve Funk of the Advanced Research Projects Agency's Advanced Systems Technology Office, under a subtask of Task Order A-132, entitled "National Guard Combat Service Support Training: Opportunities and Requirements." The work represents fulfillment of that subtask.

This examination of ARNG training depended on data, data-processing assistance, and tutorial material provided by many people, most of whom are associated with personnel management and training in the Army's active component and reserve components. Initial and continuing assistance on ARNG personnel matters was provided by Larry Lutz of the Army National Guard Bureau, ARNG Readiness Center. Data runs from the Standard Installation/Division Personnel System (SIDPERS) and tables of organization and equipment (TOE) databases were made by Fred McKenzie and Dennis Buerk of the General Research Corporation. Computer processing of ARNG-personnel-record extracts from SIDPERS was done by an Institute for Defense Analyses consultant, Karen Garcia.

More data and tutorial material were provided by others in various organizations of the Army and ARNG:

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ABBREVIATIONS

AC	active component
ADT	active duty for training
AIT	advanced individual training
AOU	all other units
ARNG	U.S. Army National Guard
ARPA	Advanced Research Projects Agency
CMF	career management field
CSS	combat service support
FSB	forward support battalion
IADT	initial active duty for training
IDT	inactive duty training
IET	initial entry training
MOS	military occupational specialty
MOSQ	MOS qualified
NA	not applicable
NPS	nonprior service
NT	not taught
NTC	National Training Center
RC	reserve component
RMT	regional maintenance training
SIDPERS	Standard Installation/Division Personnel System
SIMTAR	Simulation in Training for Advanced Readiness
SL	skill level
TOE	table(s) of organization and equipment

SUMMARY

A. BACKGROUND

The desire to improve Army National Guard (ARNG) training and to demonstrate the effectiveness and affordability of advanced distributed training technologies have led the Advanced Research Projects Agency (ARPA) to formulate its Simulation in Training for Advanced Readiness (SIMITAR) program. Under SIMITAR, ARPA will use new technologies to deliver training to two ARNG brigades, the 48 Infantry Brigade and the 116 Armored Brigade, that are scheduled to rotate to the National Training Center (NTC) in FYs 96 and 97, respectively.

B. PURPOSE

The ARPA sponsor has based decisions on courseware development on needs identified by this study. The study identifies Combat Service Support (CSS) military occupational specialties (MOSs) that would be expected to benefit most by some form of individual training that would supplement training given to ARNG personnel by current training curricula; additional technical training for unskilled personnel is a particular concern.

C. METHODOLOGY

The benefits of the supplementary training might be determined by measurements at the NTC, and/or compared with the training state of other units that do not receive supplementary training. Training requirements, by MOSs and skill levels, are developed from personnel records and tables of organization and equipment of the two-brigade test group. Training requirements, by MOS, are also developed for zero-skill-level personnel in a control group of two brigades. Zero-skill-level personnel consist of (1) recent high school graduates who have no prior service experience and who are able to spend several months attending basic training and advanced individual training (AIT) at active Army schools and (2) prior service personnel who are filling MOS positions for which they are not qualified and whose employment commitments generally preclude their going away to school for more than a few weeks. In addition to identifying training requirements for

zero-skill-level personnel, with and without prior service, the study identifies training needs for non-zero-skill-level personnel, who occupy positions requiring higher skill levels.

D. AGGREGATE TRAINING DEFICITS

Shortages of MOS-qualified CSS personnel in the 48 and 116 Brigades in mid-1993 are aggregated and compared to assigned strengths in Table S-1 and to authorized strengths in Table S-2.

Table S-1. Aggregate CSS Training Deficits of the 48 and 116 Brigades Based on Mid-1993 Assigned Strengths

Skill Level	Variable	Brigade	
		48 Infantry	116 Armored
1	Number of positions in TOE, N(TOE)	550	475
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)	156	147
	N(UNQ) + N(TOE)	.28	.31
2-5	Number of positions in TOE, N(TOE)	576	506
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)	126	118
	N(UNQ) + N(TOE)	.22	.23

Table S-2. Aggregate CSS Training Deficits of the 48 and 116 Brigades Based on Mid-1993 Authorized Strengths

Skill Level	Variable		Brigade	
			48 Infantry	116 Armored
1	Number of positions in TOE, N(TOE)		864	878
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)	Nonprior service personnel	85	86
		Personnel with prior service	151	219
	N(UNQ) + N(TOE)	Nonprior service personnel	.10	.10
		Personnel with prior service	.17	.25
2	Number of positions in TOE, N(TOE)		263	159
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)		53	57
	N(UNQ) + N(TOE)		.20	.36
3-5	Number of positions in TOE, N(TOE)		243	166
	Number of positions filled by personnel who are not MOS qualified, N(UNQ)		40	36
	N(UNQ) + N(TOE)		.16	.22

E. FINDINGS

- Mid-1993 shortages of qualified personnel by MOS are identified for the 48 and 116 Brigades in Tables 4 and 5, respectively, in Chapter I.
- Curricula and standards in AIT are the same for ARNG personnel as they are for active Army personnel.
- Resident courses at proponent schools, which are attended by nonprior service personnel in the RCs as well as by new recruits in the Army, provide training in almost all critical tasks.
- Supplementary AIT should target those who need reclassification training; however, courseware developed for distributed training would also be useful for extending AIT for nonprior service personnel.

I. INTRODUCTION

A. BACKGROUND

Defense cutbacks are causing the Army to reduce the number of units and personnel in its active components. A smaller active Army means increased reliance on the reserve components (RCs). Combat service support (CSS) soldiers of the Army National Guard (ARNG) are an important part—both in mission¹ and in numbers²—of RC support. A wish to improve ARNG training and a desire to demonstrate the effectiveness and affordability of advanced distributed training technologies have led the Advanced Research Projects Agency (ARPA) to formulate its Simulation in Training for Advanced Readiness (SIMITAR) program. Under SIMITAR, ARPA will use new technologies to deliver training to enlisted populations of two ARNG brigades, the 48 Infantry Brigade in Georgia and the 116 Armored Brigade in Idaho, which are slated for deployment to the National Training Center (NTC) in FYs 96 and 97, respectively.

B. OBJECTIVE

The task objective is to assess the CSS training requirements of the 48 Infantry Brigade and the 116 Armored Brigade by identifying groups most in need of training to supplement initial technical training. The training requirements should focus on acquisition of new skills rather than training to maintain skills already acquired.

C. THE EXPERIMENT

One or more of several technologies will be used to deliver supplementary technical training to widely-dispersed CSS soldiers of the 48 and 116 Brigades: computer-based instruction, interactive multimedia, video teletraining, simulation, and networking. The supplementary training is expected to improve unit performance at the NTC. However, the

¹ Combat service support, an organic logistics part of a fighting force (vis-à-vis logistical support from external sources), sustains battle by maintaining and supporting soldiers and their weapon systems in operations. The CSS functions include manning, arming, fueling, fixing, and moving the supported force (manning involves a medical system for preserving the force's fighting strength) (Ref. 1).

² A previous IDA Study of RC training in the Army indicated that 42 percent of the ARNG was involved in CSS (Ref. 2).

benefits of the additional training are to be measured in an as yet undefined way; they might be measured at the NTC, and they might be measured against a control group. The control group consists of two brigades, the 218 Infantry Brigade in South Carolina and the 155 Armored Brigade in Mississippi, which have comparable missions and size but whose CSS soldiers are not expected to receive the supplementary technical training.

D. TARGET POPULATION

Two groups of skill level 0 (zero)³ ARNG soldiers have to acquire basic technical skills. One group, nonprior service (NPS) recruits, receives initial entry training (IET), which consists of basic military training and advanced individual training (AIT),⁴ in curricula for all new recruits at active Army facilities. An issue concerning IET: Is too much AIT left to ARNG units to conduct? The other group is prior service soldiers who require reclassification training for military occupational specialties (MOSs) different from MOSs held in earlier service. Unlike NPS recruits, who are just out of high school, they do not need basic training and they usually cannot break away from civilian jobs to attend lengthy AIT in their new duty MOSs.

Skill acquisition (vis-à-vis skill sustainment) concerns a third group of ARNG soldiers, who are at SL 1 or above but whose duty MOS jobs require higher skill levels.

This study uses 146 MOSs in 13 career management fields (CMFs) to identify CSS soldiers as shown in Table 1. This assumption omits CSS soldiers involved in Personnel Services Support, which includes Personnel and Administration Services, Finance Services, Chaplain Activities, Public Affairs, and Legal Service Support.

The forward support battalion (FSB) is often the focus of concern about CSS in a combat brigade. Tables 2 and 3 show that CSS is disproportionately represented in the FSBs of two test brigades and the two control brigades: while one out of six soldiers of all

³ Skill level identifies skills, proficiency, or ability--level of qualification--typically required for successful performance at the grade with which the skill level is associated. Levels of qualification are identified by the numbers "0" through "5." Skill level "0" is used with an MOS to identify personnel undergoing training for award of a primary MOS. The following relationships exist between skill level (SL) and grade: SL 1 ~ E3 and E4; SL 2 ~ E5; SL 3 ~ E6; SL 4 ~ E7; SL 5 ~ E8 and E9 (Ref. 3).

⁴ Advanced individual training is given to enlisted personnel subsequent to completion of basic training in order to qualify them for award of a MOS; it is also training conducted at training centers or Army service schools to qualify an individual to perform an entry-level or higher MOS.

MOSs are in the FSBs, about four out of 10 CSS soldiers are in FSBs while the other six of 10 are distributed among all other units (AOU).⁵

Table 1. Combat Service Support MOSs

CMF 23	Air Defense Systems Maintenance									
	23R	24C	24G	24M	24N	24T	25L			
CMF 27	Land Combat and Air Defense System Direct and General Support Maintenance									
	24H	24K	27B	27E	27F	27G	27H	27J	27K	27L
	27M	27T	27X							
CMF 29	Signal Maintenance									
	29E	29J	29N	29S	29V	29W	29Y	39C	39D	39E
	39G	39V								
CMF 33	Electronic Warfare/Intercept Systems Maintenance									
	33R	33T	33V	33Y						
CMF 35	Electronic Maintenance and Calibration									
	35H	35Y	39B							
	39S	39V								
CMF 63	Mechanical Maintenance									
	44B	44E	45B	45D	45E	45G	45K	45N	45T	52C
	52D	52F	52X	62B	63B	63D	63E	63G	63H	63J
	63N	63S	63T	62W	63Y					
CMF 67	Aircraft Maintenance									
	67G	67H	67N	67R	67S	67T	67U	67V	67X	67Y
	68B	68D	68F	68G	68H	68J	68K	68L	68N	68P
	68Q	68R	68X							
CMF 55	Ammunition									
	55B	55D	55G	55R						
CMF 76	Supply and Service									
	57F	76C	76J	76P	76V	76X	76Y	76Z		
CMF 77	Petroleum and Water									
	77F	77L	77W							
CMF 88	Transportation									
	88H	88K	88L	88M	88N	88P	88Q	88R	88S	88T
	88U	88V	88W							
CMF 91	Medical									
	01H	35U	42C	42D	42E	71G	76J	91B	91C	91D
	91E	91F	91G	91H	91J	91L	91M	91N	91P	91Q
	91R	91S	91T	91U	91V	91W	91X	91Y	92B	92E
CMF 94	Food Service									
	94B									

⁵ Table 2 authorized strengths, which, for all units in both brigades, are equal to structured (or required) strengths, are from Reserve Components Troop Basis of the Army (popularly called the Buff Book) (Ref. 4); Buff Book data for the four brigades are in Appendix A. Table 3 data are aggregates from the SIDPERS-extract file.

Table 2. Distribution of Enlisted Personnel Between Forward Support Battalions and All Other Units in Four Brigades^a

Brigade	Forward Support Battalion		All Other Units		TOTAL	
	N	%	N	%	N	%
48 Infantry	666		3437		4103	
		16		84		100
116 Armored	673		3260		3933	
		17		83		100
155 Armored	675		3178		3853	
		18		82		100
218 Infantry	666		3274		3940	
		17		83		100
TOTALS	2680		13,149		15,829	
		17		83		100

^a Source: Ref. 4. The 48 and 116 Brigades comprise the test group, and the 155 and 218 Brigades comprise the control group.

Table 3. Distribution of Enlisted Combat Service Support Personnel Between Forward Support Battalions and All Other Units in Four Brigades^a

Brigade	Forward Support Battalion		All Other Units		TOTAL	
	N	%	N	%	N	%
48 Infantry	1,178		764		1342	
		43		57		100
116 Armored	354		627		981	
		36		64		100
155 Armored	449		634		1083	
		41		59		100
218 Infantry	571		634		1205	
		47		53		100
TOTALS	1952		2659		4611	
		42		58		100

^a Source: Ref. 4. The 48 and 116 Brigades comprise the test group, and the 155 and 218 Brigades comprise the control group.

Extracts from the July 1993 SIDPERS-ARNG⁶ database were used to form a computer file with the following data elements in records for all enlisted personnel of the two test brigades and the two control brigades:

<u>Data Element Identifier</u>	<u>Data Element</u>
1-190	Social Security Number
1-82	Duty MOS Designator
1-207	Training Category
1-159	Primary MOS Designator
1-160	Basis for Acquiring Primary MOS Designator
1-180	Secondary MOS Designator
1-5	Additional MOS Designator
1-214	Unit Processing Code
1-223	Zip Code

Data in the SIDPERS-extract file were used to compare the number of personnel who are duty MOS qualified (MOSQ) with the assigned strength for CSS MOSs in the 48 and 116 Brigades. These comparisons are shown in Tables 4 and 5, where personnel grades E3-E4 represent SL1 and grades E5-E8 represent SLs 2 through 5.

While this study focuses on the 48 and 116 Brigades, several statistical views of the training state of the 155 and 218 Brigades are also provided in this report for possible future test group versus control group comparisons.

⁶ SIDPERS is the Standard Installation/Division Personnel System. Data element descriptions are found in a National Guard Bureau SIDPERS Data Element Dictionary (Ref. 5).

Table 4. MOSQ Status in the 48 Infantry Brigade

MOS		(Duty Mos Qualified) ÷ (Assigned Strength)	
		E3-E4	E5-E8
27B	Land Combat Support System Test Specialist		0/1 = 0.00
27E	TOW/Dragon Missile Electronic Repairer	3/7 = 0.43	3/4 = 0.75
29E	Radio Repairer	1/3 = 0.33	3/3 = 1.00
29J	Telecommunications Terminal Device Repairer	0/3 = 0.00	1/2 = 0.50
29N	Switching Central Repairer	1/4 = 0.25	1/1 = 1.00
29S	Communications Security Equipment Repairer	1/2 = 0.50	
29W	Communications Electronics Maintenance Chief		1/1 = 1.00
33U	Medical Equipment Repairer Advanced	1/1 = 1.00	
39C	Target Acquisition/Surveillance Radar Repairer		0/1 = .00
39E	Special Electronic Devices Repairer	2/3 = 0.67	1/1 = 1.00
44B	Metal Worker	4/6 = 0.67	1/1 = 1.00
44E	Machinist	1/1 = 1.00	0/1 = 0.00
45B	Small Arms/Artillery Repairer	3/3 = 1.00	4/4 = 1.00
45D	Self-Propelled Field Artillery Turret Mechanic	1/2 = .50	2/2 = 1.00
45E	M1 Abrams Tank Turret Mechanic	7/9 = 0.28	1/2 = .50
45G	Fire Control Repairer RTS-M	0/2 = .00	
45K	Armorment Repairer	2/2 = 1.00	6/6 = 1.00
45N	M60A1/A3 Tank Turret Mechanic	0/1 = 0.00	
45T	Bradley FVS Turret Mechanic	8/12 = 0.67	3/4 = .75
45Z	(Now 45K)		1/1 = 1.00
52C	Utilities Equipment Repairer	6/7 = 0.86	1/2 = 0.50
52D	Power-Generation Equipment Repairer	16/21 = 0.76	10/11 = 0.91
52X	Special Purpose Equipment Repairer		1/2 = 0.50
55B	Ammunition Specialist	2/2 = 1.00	2/3 = 0.67
55R	Ammunition Stock Control and Acctg Specialist	0/1 = 0.00	0/1 = 0.00
55Z	Ammunition Supervisor		1/1 = 1.00

(continued)

Table 4 (continued)

		(Duty Mos Qualified) + (Assigned Strength)	
MOS		E3-E4	E5-E8
57F	Mortuary Affairs Specialist		1/1 = 1.00
62B	Construction Equipment Repairer	5/7 = 0.71	3/3 = 1.00
63B	Light Wheel Vehicle Mechanic	22/33 = 0.70	27/34 = 0.79
63D	Self-Propelled Field Artillery Repairer	3/9 = 0.33	16/20 = 0.75
63E	M1 Abrams Tank System Mechanic	7/9 = 0.78	20/24 = 0.83
63G	Fuel and Electrical System Repairer	1/3 = 0.33	1/1 = 1.00
63H	Track Vehicle Repairer	13/15 = 0.87	20/22 = 0.91
63J	QM and Chemical Equipment Repairer	4/5 = 0.80	3/3 = 1.00
63S	Heavy Wheel Vehicle Mechanic	4/13 = 0.31	6/8 = 0.75
63T	Bradley Fighting Vehicle System Mechanic	19/46 = 0.41	54/77 = 0.70
63W	Wheel Vehicle Repairer	6/9 = 0.67	4/7 = .57
63Y	Track Vehicle Mechanic	1/3 = 0.33	1/2 = 0.50
63Z	Mechanical Maintenance Supervisor		2/3 = 0.67
67N	UH-1 Helicopter Repairer	1/1 = 1.00	1/3 = 0.33
67V	67V Observation/Scout Helicopter Repairer		0/6 = 0.00
67Z	Aircraft Maintenance Senior Sergeant		0/1 = 0.00
76C	Equipment Records and Parts Specialist ^a	10/15 = 0.67	16/26 = 0.62
76J	Medical Supply Specialist	5/5 = 1.00	1/2 = 0.50
76P	Material Control and Accounting Specialist ^a	4/10 = 0.40	2/7 = 0.29
76V	Material Storage and Handling Specialist ^a	18/19 = 0.95	2/3 = 0.67
76X	Subsistence Supply Specialist ^a	2/2 = 1.00	2/3 = 0.67
76Y	Unit Supply Specialist	21/26 = 0.81	34/40 = 0.85
76Z	Senior Supply/Service Sergeant		3/8 = 0.38

^a 76C, 76P, 76V, and 76X have been consolidated; 92A Automated Logistical Specialist replaces them.

(continued)

Table 4 (continued)

		(Duty Mos Qualified) ÷ (Assigned Strength)	
MOS		E3-E4	E5-E8
77F	Petroleum Supply Specialist	23/28 = 0.82	7/9 = 0.78
77W	Water Treatment Specialist	2/2 = 1.00	
88M	Motor Transport Operator	46/56 = 0.82	54/64 = 0.84
88Z	Transportation Senior Sergeant		1/1 = 1.00
91B	Medical Specialist	76/91 = 0.84	55/58 = 0.95
91C	Practical Nurse	1/1 = 1.00	1/1 = 1.00
91D	Operating Room Specialist		1/1 = 1.00
91E	Dental Specialist	1/1 = 1.00	1/1 = 1.00
91G	Behavioral Science Specialist		1/1 = 1.00
91Q	Pharmacy Specialist	0/1 = 0.00	0/1 = 0.00
92B	Medical Laboratory Specialist	1/1 = 1.00	
94B	Food Service Specialist	38/47 = 0.81	67/80 = 0.84
TOTALS		394/550 = .72	450/576 = .78

Table 5. MOSQ Status in the 116 Armored Brigade

MOS		(Duty Mos Qualified) + (Assigned Strength)	
		E3-E4	E5-E8
27B	Land Combat Support System Test Specialist		0/1 = 0.00
27E	TOW/Dragon Missile Electronic Repairer	1/1 = 1.00	1/4 = 0.25
29E	Radio Repairer	4/5 = 0.80	2/3 = 0.67
29J	Telecommunications Terminal Device Repairer		1/1 = 1.00
29S	Communications Security Equipment Repairer		2/2 = 1.00
29Z	Electronics Maintenance Chief		1/1 = 1.00
35G	Medical Equipment Repairer	1/1 = 1.00	
39D	DAS3 Computer Systems Repairer	1/1 = 1.00	2/2 = 1.00
39E	Special Electronic Devices Repairer	2/3 = 0.67	1/1 = 1.00
39V	Computerized Systems Maintenance Chief		0/1 = 0.00
44B	Metal Worker	4/5 = 0.80	1/1 = 1.00
44E	Machinist	1/2 = 0.50	1/1 = 1.00
45D	Self-propelled Field Artillery Turret Mechanic	0/1 = 0.00	
45E	M1 Abrams Tank Turret Mechanic	10/14 = 0.71	2/4 = 0.50
45G	Fire Control Repairer RTS-M	0/1 = 0.00	
45K	Armament Repairer	2/2 = 1.00	6/9 = 0.67
45L	(Now 45B or 45K)		1/2 = 0.50
45T	Bradley FVS Turret Mechanic	3/4 = 0.75	0/1 = 0.00
45Z	(Now 45K)		1/1 = 1.00
52C	Utilities Equipment Repairer	1/2 = 0.50	2/3 = 0.67
52D	Power-Generation Equipment Repairer	7/8 = 0.88	8/11 = 0.73
52X	Special Purpose Equipment Repairer		1/1 = 1.00
55B	Ammunition Specialist	0/5 = 0.00	2/3 = 0.67
55R	Ammunition Stock Control and Acctg Specialist	1/1 = 1.00	1/1 = 1.00

(continued)

Table 5 (continued)

		(Duty Mos Qualified) + (Assigned Strength)	
MOS		E3-E4	E5-E8
55X	Ammunition Inspector		0/1 = 0.00
57F	Mortuary Affairs Specialist		1/1 = 1.00
62B	Construction Equipment Repairer	1/3 = 0.33	1/1 = 1.00
63B	Light Wheel Vehicle Mechanic	28/32 = 0.88	36/43 = 0.84
63D	Self-Propelled Field Artillery System Mechanic	4/14 = 0.29	6/13 = 0.46
63E	M1 Abrams Tank System Mechanic	24/30 = 0.80	10/21 = 0.48
63G	Fuel And Electrical System Repairer		1/1 = 1.00
63H	Track Vehicle Repairer	8/13 = 0.62	28/34 = 0.82
63J	QM and Chemical Equipment Repairer	1/1 = 1.00	2/2 = 1.00
63N	M60A1/A3 Tank System Mechanic	3/4 = 0.75	0/2 = 0.00
63S	Heavy Wheel Vehicle Mechanic	12/13 = 0.92	7/8 = 0.88
63T	Bradley FVS Mechanic	24/38 = .63	27/35 = 0.77
63W	Wheel Vehicle Repairer	5/7 = 0.71	4/5 = 0.80
63Y	Track Vehicle Mechanic	0/1 = 0.00	2/4 = 0.50
63Z	Mechanical Maintenance Supervisor		1/1 = 0.50
76C	Equipment Records and Parts Specialist ^a	6/9 = 0.67	13/16 = 0.81
76J	Medical Supply Specialist	1/2 = 0.50	1/1 = 1.00
76P	Material Control and Accounting Specialist ^a	5/9 = 0.56	8/10 = 0.80
76V	Material Storage and Handling Specialist ^a	4/6 = 0.67	4/6 = 0.67
76X	Subsistence Supply Specialist ^a	0/1 = 0.00	2/3 = 0.67
76Y	Unit Supply Specialist	12/22 = 0.55	22/23 = 0.96
76Z	Senior Supply/Service Sergeant		2/2 = 1.00

^a 76C, 76P, 76V, and 76X have been consolidated; 92A Automated Logistical Specialist replaces them.

(continued)

Table 5 (continued)

		(Duty Mos Qualified) + (Assigned Strength)	
MOS		E3-E4	E5-E8
77F	Petroleum Supply Specialist	10/19 = 0.53	20/29 = 0.69
77W	Water Treatment Specialist		2/4 = 0.50
88M	Motor Transport Operator	43/72 = 0.60	48/71 = 0.68
91A	(Now 91B)	1/1 = 1.00	
91B	Medical Specialist	62/76 = 0.82	41/49 = 0.84
91C	Practical Nurse	1/1 = 1.00	
91G	Behavioral Science Specialist	1/1 = 1.00	1/1 = 1.00
91P	X-Ray Specialist	1/2 = 0.50	
91S	Preventive Medicine Specialist	1/1 = 1.00	1/1 = 1.00
91Y	Eye Specialist	0/1 = 0.00	
92B	Medical Laboratory Specialist	1/1 = 1.00	
94B	Food Service Specialist	31/39 = 0.79	61/64 = 0.95
TOTALS		328/475 = .69	388/506 = .77

II. NONPRIOR SERVICE

A. TRAINING REQUIREMENTS

Table 6 indicates that 6 percent to 12 percent of CSS personnel in the four brigades are nonprior service (NPS) personnel, who require initial entry training. The distribution of NPS personnel between forward support battalions (FSB) and all other units (ACU) of the four brigades in Table 7 is similar to the distribution of all CSS personnel: about 40 percent in the FSB and 60 percent in AOU.

For the 48 and 116 Brigades, Tables 8 and 9, respectively, show the required number of authorized grade E3 and E4 positions (a surrogate for required skill level 1 strengths) for CSS MOSs and the number of NPS personnel to be trained.¹ The July 1993 training status of NPS personnel of the 48 and 116 Brigades is shown for CSS MOSs in Tables 10 and 11, respectively. Corresponding data for the 155 and 218 Brigades are shown in Tables 12 and 13, respectively. Tables 10 through 13 show the number of personnel, by duty MOS, whose primary skill level indicator in the SIDPERS-extract file is zero. Six of seven training categories in these tables identify the status of NPS personnel by the following code:

<u>Code</u>	<u>Definition</u>
F	Currently on initial active duty for training (IADT)
L	Awaiting IADT without pay
P	Awaiting IADT with pay
Q	Awaiting second part of IADT ²
U	Serving on second part of IADT
X	Assigned to ARNG unit for 12 drills or 90 days

A seventh Training Category, Code A, identifies personnel who are assigned to an ARNG unit for 48 inactive duty training (IDT) assemblies annually. The Code A category includes

¹ From brigade tables of organization and equipment. In both brigades, the authorized strength and the required strength are equal for almost all TOE MOSs; required strength is the minimum number of manpower spaces that a unit requires to perform its mission; authorized strength is the portion of required manpower that can be supported by allocated manpower.

² Under the ARNG's Split Training Option, high school juniors can go to basic training during the summer before their senior year and then take AIT after graduation.

(1) personnel whose primary MOSs do not match their duty MOSs and who, thus, need reclassification training and (2) other personnel whose primary MOSs match their duty MOSs. These latter personnel are not really at SL 0; their primary skill level indicator in SIDPERS has not been updated because of oversight or because a security clearance had not yet been approved.³

B. TRAINING SITES

Several Army training centers and schools were visited or contacted by telephone to discuss critical task⁴ training for SL 1 of these 21 MOSs:⁵

27E	TOW/Dragon Missile Electronic Repairer
29E	Radio Repairer
29J	Telecommunications Terminal Device Repairer
45E	M1 Abrams Tank Turret Mechanic
45T	Bradley FVS Turret Mechanic
52C	Utilities Equipment Repairer
52D	Power-Generation Equipment Repairer
55B	Ammunition Specialist
63B	Light Wheel Vehicle Mechanic
63D	Self-Propelled Field Artillery Repairer
63E	M1 Abrams Tank System Mechanic
63H	Track Vehicle Repairer
63S	Heavy Wheel Vehicle Mechanic
63T	Bradley Fighting Vehicle System Mechanic
63W	Wheel Vehicle Repairer
63Y	Track Vehicle Mechanic
77F	Petroleum Laboratory Specialist
88M	Motor Transport Operator
91B	Medical Specialist
91S	Preventive Medicine Specialist
94B	Food Service Specialist

The investigation focused on the location for training critical tasks: How many critical tasks are taught in resident courses in AIT, and how many are left to be taught at the soldiers' units? Each proponent service school convenes a board of subject matter experts, including RC representatives about every two years (1) to select from a list of candidate

³ Primary skill levels were verified in telephone conversations with the SIDPERS-ARNG offices that handle the 48 and 116 Brigades.

⁴ Tasks that personnel must master to become MOS qualified are called critical tasks.

⁵ It was not feasible to investigate training for all CSS MOSs; a large sample of MOSs was selected for investigation on the basis of number of personnel and/or percentage of unit strength requiring training.

tasks, critical tasks that are trained to the same standard in the AC and the RCs and (2) to select the sites for training the tasks.

Table 14 summarizes the results of that investigation. Of 813 critical tasks involving technical training, 95 percent (769/813) are taught in AIT, where training curricula and standards are the same for ARNG personnel as they are for active Army personnel: Grades of at least 70 percent are required to pass written tests in all phases of AIT (in some cases a passing grade of 80 percent is required), and students are required to demonstrate critical task mastery in hands-on demonstrations before proceeding to a next phase. The five percent of technical tasks that are left for the units to teach are related to obsolete equipment or involve knowledge transfer from similar tasks that are taught in AIT. Of the 44 tasks left for the units to teach for the 21 MOSs in Table 14, 27 (61 percent) involve MOSs 29E and 88M.

Examples of obsolete equipment include teletypewriters, which have been replaced by FAX machines, manual steering by power steering, carburetors by fuel injection, and spark ignition by compression ignition.

The practical necessity of utilizing knowledge transfer for training is illustrated by the vehicle-versus-vehicle component matrix in Table 14, where "T" indicates tasks pertaining to the given component are taught in AIT and "TR" indicates training by knowledge transfer ("NA" and "NT" indicate not applicable and not taught, respectively). Some MOSs, like 63B, Light Wheel Vehicle Mechanic, in Table 15, support a large number of end items; knowledge and skills gained in AIT on some items of equipment are directly applicable and easily transferred to other equipment.

A couple of observations by training developers and training evaluators for many MOSs related to mechanical maintenance might be useful in decisions about supplementary training. First, experience has shown that the Regional Maintenance Training (RMT) facilities, which provide excellent hands-on training on equipment at their facilities, can also be indirectly useful for reclassification training: the RMTs can train trainers, who are already MOS qualified, and who, in turn, can give unit personnel hands-on training on unit equipment during IDT periods. But the train the trainer concept has a cost: the trainers are not available to do their normal unit jobs.

The other mechanical maintenance observation is that critical tasks for SL 3+ involve a lot of diagnostics, which are well suited for training by interactive videodisc and other distance learning technologies.

Table 6. Nonprior Service Part of Combat Service Support in Four Brigades

Brigade	Combat Service Support (CSS)	Nonprior Service Support (NPS)	(NPS)/(CSS)
48 Infantry	1342	85	.06
116 Armored	981	74	.08
155 Armored	1083	125	.12
218 Infantry	1205	84	.07
TOTALS	4611	368	.08

Table 7. Distribution of Nonprior Service Personnel in Four Brigades

Brigade	Forward Support Battalion (FSB)	All Other Units (AOU)	$\frac{(\text{FSB})}{(\text{FSB}) + (\text{AOU})}$
48 Infantry	58	77	.43
116 Armored	45	72	.35
155 Armored	48	95	.34
218 Infantry	61	84	.42
TOTALS	212	328	.40

**Table 8. Nonprior Service Training Requirements by Duty MOS
for the 48 Infantry Brigade**

	MOS	Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
27E	TOW/Dragon Missile Electronic Repairer	18	3	0.17
29J	Telecommunications Terminal Device Repairer	2	1	0.50
44B	Metal Worker	10	1	0.10
45E	M1 Abrams Tank Turret Mechanic	9	2	0.22
45G	Fire Control Repairer RTS-M	3	1	0.33
45K	Armament Repairer	14	1	0.07
52D	Power-Generation Equipment Repairer	24	1	0.04
55B	Ammunition Specialist	5	1	0.20
62B	Construction Equipment Repairer	5	2	0.40
63B	Light Wheel Vehicle Mechanic	44	4	0.09
63J	QM and Chemical Equipment Repairer	12	2	0.17
63S	Heavy Wheel Vehicle Mechanic	33	2	0.06
63T	Bradley Fighting Vehicle System Mechanic	65	13	0.20
63W	Wheel Vehicle Repairer	30	1	0.13
63Y	Track Vehicle Mechanic	11	1	0.09
76C	Equipment Records and Parts Specialist	27	2	0.07
76P	Material Control and Accounting Specialist	8	1	0.13
76V	Material Storage and Handling Specialist	18	1	0.06
76Y	Unit Supply Specialist	34	4	0.18
77F	Petroleum Laboratory Specialist	57	2	0.04
77W	Water Treatment Specialist	1	1	1.00
88M	Motor Transport Operator	48	5	0.10
91B	Medical Specialist	104	28	0.27
91P	X-Ray Specialist	1	1	1.00
92A	Automated Logistical Specialist	60	1	0.02
94B	Food Service Specialist	89	3	0.03
	TOTALS	732	85	0.12

**Table 9. Nonprior Service Training Requirements by Duty MOS
for the 116 Armored Brigade**

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
29E	Radio Repairer	7	1	0.14
44B	Metal Worker	8	1	0.13
45E	M1 Abrams Tank Turret Mechanic	18	1	0.06
52C	Utilities Equipment Repairer	7	1	0.14
52D	Power-Generation Equipment Repairer	26	1	0.04
63D	Self-Propelled Field Artillery Repairer	19	2	0.11
63E	M1 Abrams Tank System Mechanic	46	5	0.11
63H	Track Vehicle Repairer	37	2	0.05
63J	QM and Chemical Equipment Repairer	10	1	0.10
63S	Heavy Wheel Vehicle Mechanic	23	5	0.22
63T	Bradley Fighting Vehicle System Mechanic	45	4	0.09
76J	Medical Supply Specialist	3	1	0.33
77F	Petroleum Laboratory Specialist	72	5	0.07
88M	Motor Transport Operator	89	11	0.12
91B	Medical Specialist	100	27	0.27
91P	X-Ray Specialist	1	1	1.00
92A	Automated Logistical Specialist	62	2	0.03
94B	Food Service Specialist	87	3	0.03
TOTALS		660	74	0.11

**Table 10. Training Status of Nonprior Service Personnel
of the 48 Infantry Brigade**

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
27E	TOW/Dragon Missile Electronic Repairer	5	2			2	1		
29E	Radio Repairer	1	1						
29J	Telecommunications Terminal Device Repairer	3	2			1			
29N	Switching Central Repairer	2	2						
29S	Communications Security Equipment Repairer	1	1						
39C	Target Acquisition/Surveillance Radar Repairer	1	1						
39E	Special Electronic Devices Repairer	1	1						
44E	Machinist	1	1						
45E	M1 Abrams Tank Turret Mechanic	2							2
45G	Fire Control Repairer RTS-M	2	1	1					
45K	Armament Repairer	1		1					
52D	Power-Generation Equipment Repairer	4	3	1					
55B	Ammunition Specialist	3	2			1			
62B	Construction Equipment Repairer	3	1				1		1
63B	Light Wheel Vehicle Mechanic	4				1	1		2
63E	M1 Abrams Tank System Mechanic	1	1						

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)

Table 10. (Continued)

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
63J	QM and Chemical Equipment Repairer	2		1		1			
63S	Heavy Wheel Vehicle Mechanic	5	3	1		1			
63T	Bradley Fighting Vehicle System Mechanic	17	4	2		4	3		4
63W	Wheel Vehicle Repairer	4	3			1			
63Y	Track Vehicle Mechanic	2	1			1			
67V	Observation/Scout Helicopter Repairer	1	1						
76C	Equipment Records and Parts Specialist	2					2		
76P	Material Control and Accounting Specialist	1					1		
76V	Material Storage and Handling Specialist	1				1			
76Y	Unit Supply Specialist	6	2	4					
77F	Petroleum Laboratory Specialist	2				2			
77W	Water Treatment Specialist	1				1			
88M	Motor Transport Operator	11	6			5			
91B	Medical Specialist	35	7	3		16	4		5
91P	X-Ray Specialist	1		1					
91Q	Pharmacy Specialist	1	1						
92A	Automated Logistical Specialist	1				1			
94B	Food Service Specialist	6	3			2			1
TOTALS		135	50	15	0	42	13	0	15

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

**Table 11. Training Status of Nonprior Service Personnel
of the 116 Armored Brigade**

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
29E	Radio Repairer	2	1	1					
39C	Target Acquisition/Surveillance Radar Repairer	1	1						
39E	Special Electronic Devices Repairer	1	1						
44B	Metal Worker	1		1					
45E	M1 Abrams Tank Turret Mechanic	3	2		1				
45G	Fire Control Repairer RTS-M	1	1						
45K	Armament Repairer	2	2						
45T	Bradley FVS Turret Mechanic	1	1						
52C	Utilities Equipment Repairer	1		1					
52D	Power-Generation Equipment Repairer	1		1					
62B	Construction Equipment Repairer	1	1						
63B	Light Wheel Vehicle Mechanic	1	1						
63D	Self-Propelled Field Artillery Repairer	3	1						2
63E	M1 Abrams Tank System Mechanic	7	2	1		2			2

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(continued)

Table 11. (continued)

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
63H	Track Vehicle Repairer	3	1				1		1
63J	QM and Chemical Equipment Repairer	1		1					
63S	Heavy Wheel Vehicle Mechanic	5		1		2			2
63T	Bradley Fighting Vehicle System Mechanic	5	1	2			1		1
63W	Wheel Vehicle Repairer	2	2						
76J	Medical Supply Specialist	1							1
77F	Petroleum Laboratory Specialist	9	4	1		2	1		1
88M	Motor Transport Operator	16	5			4	3		4
91B	Medical Specialist	37	10	7	1	8	4	1	6
91P	X-Ray Specialist	1		1					
92A	Automated Logistical Specialist	5	3	1				1	
94B	Food Service Specialist	5	2	1					2
TOTALS		116	42	20	2	18	10	2	22

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

**Table 12. Training Status of Nonprior Service Personnel
of the 155 Armored Brigade**

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
27E	TOW/Dragon Missile Electronic Repairer	3	1				2		
29E	Radio Repairer	1		1					
29J	Telecommunications Terminal Device Repairer	1	1						
39E	Special Electronic Devices Repairer	1	1						
42E	Optical Laboratory Specialist	1	1						
44B	Metal Worker	3				2			1
44E	Machinist	1				1			
45B	Small Arms/Artillery Repairer	1						1	
45E	M1 Abrams Tank Turret Mechanic	1				1			
45K	Armament Repairer	3		2					1
45N	M60A1/A3 Tank Turret Mechanic	1				1			
45T	Bradley FVS Turret Mechanic	3							3
52C	Utilities Equipment Repairer	3	2						1
52D	Power-Generation Equipment Repairer	1					1		
62B	Construction Equipment Repairer	2				1			1
63B	Light Wheel Vehicle Mechanic	10	1	2		2	3		2
63D	Self-Propelled Field Artillery Repairer	8	1			6			1
63E	M1 Abrams Tank System Mechanic	4	2	1		1			

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)

Table 12. (Continued)

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
63H	Track Vehicle Repairer	2				2			
63J	QM and Chemical Equipment Repairer	1		1					
63S	Heavy Wheel Vehicle Mechanic	2		1			1		
63T	Bradley Fighting Vehicle System Mechanic	10	1	1		4	3		1
71G	Patient Administration Specialist	3		1		1	1		
76J	Medical Supply Specialist	2				1			1
77F	Petroleum Laboratory Specialist	2							2
88M	Motor Transport Operator	30	4	5		6	3		12
91B	Medical Specialist	33		6		13	4		10
91Q	Pharmacy Specialist	1							1
91S	Preventive Medicine Specialist	1				1			
92A	Automated Logistical Specialist	5	2				3		
94B	Food Service Specialist	3	1			1	1		
TOTALS		143	18	21	0	44	22	1	37

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)

**Table 13. Training Status of Nonprior Service Personnel
of the 218 Infantry Brigade**

	MOS	Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
27E	TOW/Dragon Missile Electronic Repairer	4	3			1			
29E	Radio Repairer	2	1	1					
29J	Telecommunications Terminal Device Repairer	3		3					
29N	Switching Central Repairer	2	1			1			
29S	Communications Security Equipment Repairer	1		1					
39E	Special Electronic Devices Repairer	2	1	1					
44E	Machinist	2	1				1		
45B	Small Arms/Artillery Repairer	1				1			
45E	M1 Abrams Tank Turret Mechanic	3		1		1			
45G	Fire Control Repairer RTS-M	1		1					
45K	Armament Repairer	1					1		
52C	Utilities Equipment Repairer	1		1					
55B	Ammunition Specialist	1	1						
62B	Construction Equipment Repairer	1	1						
63B	Light Wheel Vehicle Mechanic	13	6	3		3	1		
63D	Self-Propelled Field Artillery Repairer	4	3						1
63E	M1 Abrams Tank System Mechanic	2				1		1	

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

(Continued)

Table 13. (Continued)

MOS		Number of Personnel With Primary Skill Level of Zero	Training Category ^a						
			A	Nonprior service personnel					
				F	L	P	Q	U	X
63G	Fuel and Electrical System Repairer	2		1					1
63H	Track Vehicle Repairer	3	2						1
63J	Qm and Chemical Equipment Repairer	2		1					1
63S	Heavy Wheel Vehicle Mechanic	3	1	1					1
63T	Bradley Fighting Vehicle System Mechanic	10	8	1		1			
63W	Wheel Vehicle Repairer	8	5			2	1		
77F	Petroleum Laboratory Specialist	10	3			3	2		2
88M	Motor Transport Operator	17	6			5	2		4
91B	Medical Specialist	17	3	3		3	5		3
92A	Automated Logistical Specialist	16	6	1		3	3	2	1
92B	Medical Laboratory Specialist	1	1						
94B	Food Service Specialist	12	8	1		2	1		
TOTALS		145	61	21	0	27	17	3	16

^aA = Assigned to ARNG unit for 48 IDT assemblies annually.

F = Currently on IADT.

L = Awaiting IADT without pay.

P = Awaiting IADT with pay.

Q = Awaiting second part of IADT.

U = Serving second part of IADT.

X = Assigned to ARNG unit for 12 drills or 90 days.

**Table 14. Critical-Task Training for Nonprior Service Soldiers in 21 MOSs:
Number of Tasks Included in Resident Courses for Advanced Individual
Training (AIT) and Number to Be Taught in Soldiers' Units
(Source: Soldier's Manuals and Training Guides for the 21 MOSs)**

MOS		Training Location for Critical Tasks			
		Technical		Administrative	
		AIT	Unit	AIT	Unit
27E	TOW/Dragon Missile Repairer	84	6 ^a	0	0
29E	Radio Repairer	83	14 ^b	0	0
29J	Telecommunications Terminal Device Repairer	17	6 ^c	0	0
45E	M1 Abrams Tank Turret Mechanic	10	0	1	0
45T	Bradley FVS Turret Mechanic	13	0	1	0
52C	Utilities Equipment Repairer	28	0	0	11
52D	Power-Generation Equipment	21	0	5	2
55B	Ammunition Specialist	28	0	0	0
63B	Light Wheel Vehicle Mechanic	31	1 ^d	4	2
63D	Self-Propelled Field Artillery Repairer	30	0	2	4
63E	M1 Abrams Tank System Mechanic	42	0	6	0
63H	Track Vehicle Repairer	14	0 ^e	1	6
63S	Heavy Wheel Vehicle Mechanic	30	1 ^f	4	0
63T	Bradley Fighting Vehicle System Mechanic	39	0	6	0
63W	Wheel Vehicle Repairer	16	1 ^g	4	3
63Y	Track Vehicle Mechanic	32	2 ^h	4	0
77F	Petroleum Laboratory Specialist	60	0	0	0
88M	Motor Transport Operator	46	13 ⁱ	0	0
91B	Medical Specialist	77	0	0	0
91S	Preventive Medicine Specialist	27	0	0	0
94B	Food Service Specialist	41	0	0	0
TOTALS		769	44	38	28

^a Hands-on training in units follows AIT introduction (4 tasks); training on obsolete equipment (jeep-mounted TOW) left for units to conduct (2).

^b Knowledge transfer from AIT-trained tasks facilitates soldiers learning similar tasks in their units (all 14 tasks).

^c Training on obsolete equipment (teletypewriters) left for units to conduct (5 tasks); knowledge transfer accounts for training the other task.

^d Knowledge transfer facilitates training in units.

^e All Direct Support (DS) maintenance tasks are trained in AIT; General Support (GS) maintenance tasks are trained in the units.

^f Training on obsolete systems (spark ignition air induction) left for units to conduct.

^g Training on obsolete systems (manual steering) left for units to conduct.

^h Training on obsolete systems (carbureted fuel and spark ignition) left for units to conduct.

ⁱ These 13 tasks include: Assisting in loading and unloading vehicles (6); vehicle preparation and preventive maintenance (3); transporting sensitive cargo and busing passengers (2); and operating and maintaining a caliber .50 machine gun (2).

**Table 15. Advanced Individual Training Strategy for 63B,
Light Wheel Vehicle Mechanic^a**
(Source: U.S. Army Ordnance Center and School)

Component \ Vehicles ^b	CUCV	HMMWV	M35A2 Series	800 Series	939 Series
Compression Ignition Engines	T	T	TR	TR	TR
Wheel Vehicle Clutch Assemblies	NA	NA	T	NA	NA
Compression Ignition Engine Fuel Systems	T	TR	T	TR	TR
Compression Ignition Air Induction Systems	T	TR	T	TR	TR
Wheel Vehicle Exhaust Systems	T	TR	T	TR	T
Vehicle Liquid Cool Systems	TR	T	T	TR	T
Vehicle Starting Systems	TR	T	T	TR	TR
Vehicle Charging Systems	TR	T	T	TR	TR
Intervehicular Electrical Connections	NT	NT	NT	NT	NT
Gages/Sending Units	T	TR	T	TR	T
Wheel Chassis Electrical Systems	T	T	TR	TR	T
Automatic Transmission Assemblies	T	T	NA	NA	T
Transfer Assemblies	T	TR	T	TR	T
Propeller Shaft Assemblies	T	TR	T	TR	T
Axle Assemblies	T	TR	T	TR	T
Disc Brake Systems	T	T	NA	NA	NA
Drum Brake Systems	T	NA	T	T	T
Hydraulic Brake Systems	T	T	NA	NA	NA
Air/Hydraulic Brake Systems	NA	NA	T	TR	NA

^a T means training is done in the resident course; TR means training by knowledge transfer; NA means not applicable; and NT means training is not done.

^b CUCV is a Commercial Utility Cargo Vehicle; HMMWV is a High Mobility Multi-Purpose Wheeled Vehicle; the M35A2 Series vehicles are 2 1/2-ton cargo trucks; the 800 series and 939 series vehicles are 5-ton cargo trucks.

III. RECLASSIFICATION

A. TRAINING REQUIREMENTS

Table 16 indicates that 13 percent to 21 percent of CSS personnel with prior service in the four brigades have primary MOSs that do match their duty MOSs; thus, they require reclassification training to become MOS qualified. The distribution of these personnel between FSB and AOU of the four brigades in Table 17, where we see that 60 percent of the reclassification training requirement for the 155 Armored Brigade is in its FSB; the FSBs of the three other brigades account for 38, 39, and 35 percent of the requirements of the 48, 116, and 218 brigades, respectively, in Table 17.

The requirements for reclassification training, by duty MOS, are shown in Table 18 for the four brigades.

For the 48 and 116 Brigades, Tables 19 and 20, respectively, show the number of authorized E3 and E4 spaces (a surrogate for authorized strength requirements for SL 1) for CSS MOSs and the number of personnel who need reclassification training.

Discussions with the 48 and 116 Brigades indicated that personnel needing reclassification training in Tables 18, 19 and 20 were either involved in that training or slated to begin training.

B. TRAINING EFFECTIVENESS

Can reclassification training be expected to be as effective as resident courses at proponent schools for nonprior service personnel? In a word, no. Proponent service schools produce complete training support packages for courses that are configured and developed for the reserve components. The RC-configured courseware includes material to teach all critical tasks to the standards used by the service schools for their resident courses. However, retention of knowledge and skills is hampered by the fact that reclassification training is spread over one or two years of inactive duty training (IDT) plus one or two two-week active-duty-for-training (ADT) periods. And the RC-configured courseware and the aggregate of IDT and ADT do not provide training time for the amount of repetition (of instruction) involved in resident course training. Moreover, training facilities at the RC

training institutions¹ are often very austere (Ref. 6). While aviation training sites and regional training sites for maintenance and medical training have up-to-date aids, devices, and simulators, classrooms in U.S. Army Reserve centers, ARNG armories, and other RC teaching areas are frequently equipped with minimal training equipment; blocks of instruction that require equipment not available during IDT must be scheduled for ADT, thus precluding trainee participation in unit activities that are not repeated in IDT assemblies.

Comparison of academic time in resident courses at proponent schools and in instruction programs for reserve component training in Table 21 illustrates the unreasonableness of expecting RC-configured courses to be as effective as resident course training. For the following MOSs at SL 1, academic hours (hours for physical fitness training, commander's time, processing in and out, and other administrative activities are excluded) are substantially greater in resident courses:

29E10	Radio Repairer
29J10	Telecommunications Terminal Device Repairer
63B10	Light Wheel Vehicle Mechanic
63E10	M1 Abrams Tank System Mechanic
77F10	Petroleum Supply Specialist
88M10	Motor Transport Operator
91B10	Medical Specialist
91S10	Preventive Medicine Specialist

Developers of RC-configured courseware for that less training time means less repetition, which they recognize as the principal disadvantage of non-resident training. Previous experience give some prior service personnel an advantage over nonprior service personnel when the duty MOSs of the former are related to MOSs for which they were previously qualified. But many prior service personnel have no such advantage. The effectiveness issue incidental to resident training versus non-resident training appears moot, however, by the expectation that courseware to help reclassification trainees should also be useful for extending AIT of nonprior service personnel.

¹ RC training institutions include Reserve Forces schools, ARNG state academics, ARNG regional academics, ARNG aviation training sites, consolidated training activities, leadership academics, and regional training sites for maintenance and medical personnel.

**Table 16. Reclassification Personnel
in Four Brigades**

Brigade	Combat Service Support (CSS)	Reclassification Personnel (RP)	RP/CSS
48 Infantry	1342	216	0.16
116 Armored	981	204	0.21
155 Armored	1083	180	0.17
218 Infantry	1205	162	0.13
TOTALS	4611	762	0.17

**Table 17. Distribution of Reclassification Personnel
in Four Brigades**

Brigade	Forward Support Battalion (FSB)	All Other Units (AOU)	$\frac{(\text{FSB})}{(\text{FSB}) + (\text{AOU})}$
48 Infantry	81	133	0.38
116 Armored	80	124	0.39
155 Armored	108	72	0.60
218 Infantry	57	105	0.35
TOTALS	326	434	0.43

Table 18. Reclassification Training Requirements by Duty MOS

MOS		Test Group		Control Group	
		48 Infantry Brigade	116 Armored Brigade	155 Armored Brigade	218 Infantry Brigade
27B	Land Combat Support System Test Specialist	1	1	1	1
27E	TOW/Dragon Missile Electronic Repairer	1	3		1
29E	Radio Repairer	2	3	1	4
29J	Telecommunications Terminal Device Repairer	2		2	
29N	Switching Central Repairer				1
29W	Communications Electronics Maintenance Chief	1			1
35U	Medical Equipment Repairer Advanced	1			1
39C	Target Acquisition/Surveillance Radar Repairer			1	
39E	Special Electronic Devices Repairer		1	2	1
39G	Automated Communications Computer Sys Repairer			2	
39V	Computerized Systems Maintenance Chief			1	
42E	Optical Laboratory Specialist			1	
44B	Metal Worker	2	1	4	1
44E	Machinist	1	1	4	1
45D	Self-Propelled Field Artillery Turret Mechanic	1		1	
45E	M1 Abrams Tank Turret Mechanic	2	4	1	1
45G	Fire Control Repairer RTS-M	2		1	
45K	Armament Repairer		3	6	3
45N	M60A1/A3 Tank Turret Mechanic	1			
45T	Bradley FVS Turret Mechanic	6	1	3	
52C	Utilities Equipment Repairer	4	5	4	1
52D	Power-Generation Equipment Repairer	5	8	10	4
52X	Special Purpose Equipment Repairer	2		1	1
55B	Ammunition Specialist	2	1	1	1
55R	Ammunition Stock Control And Acctg Specialist	2			
62B	Construction Equipment Repairer	1	1	2	2
63B	Light Wheel Vehicle Mechanic	21	12	20	10

(continued)

Table 18 (continued)

MOS		Test Group		Control Group	
		48 Infantry Brigade	116 Armored Brigade	155 Armored Brigade	218 Infantry Brigade
63D	Self-Propelled Field Artillery System Mechanic	10	10	7	11
63E	M1 Abrams Tank System Mechanic	4	11	5	5
63G	Fuel And Electrical System Repairer	1			
63H	Track Vehicle Repairer	5	17	10	6
63J	QM and Chemical Equipment Repairer		1	4	
63S	Heavy Wheel Vehicle Mechanic	8	4	12	6
63T	Bradley FVS Mechanic	14	18	8	19
63W	Wheel Vehicle Repairer	5	3	1	1
63Y	Track Vehicle Mechanic	2	4	3	3
67V	Observation/Scout Helicopter Repairer	1			
76C	Equipment Records and Parts Specialist	3	1		
76J	Medical Supply Specialist	2			1
76P	Material Control and Accounting Specialist	4			
76Y	Unit Supply Specialist	12			
77F	Petroleum Supply Specialist	9	13	1	20
77W	Water Treatment Specialist				
88M	Motor Transport Operator	23	36	16	15
91B	Medical Specialist	12	13	9	10
91C	Practical Nurse			2	1
91G	Behavioral Science Specialist			1	
91P	X-Ray Specialist		1		
91Q	Pharmacy Specialist			1	
91S	Preventive Medicine Specialist	1	1		
92A	Automated Logistical Specialist	17	12	19	16
92B	Medical Laboratory Specialist				1
94B	Food Service Specialist	19	13	12	12
TOTALS		212	204	180	162

**Table 19. Reclassification Training Requirements Compared to Authorized
MOS SL 1 Positions for the 48 Infantry Brigade**

MOS		Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
27E	Tow/Dragon Missile Electronic Repairer	18	1	0.06
29E	Radio Repairer	8	2	0.25
29P	Material Control and Accounting Specialist	8	4	0.50
29N	Switching Central Repairer	4	1	
44B	Metal Worker	10	2	0.20
45D	Self-Propelled FA Turret Mechanic	6	1	0.17
45E	M1 Abrams Tank Turret Mechanic	9	2	0.22
45G	Fire Control Repairer RTS-M	3	2	0.67
45T	Bradley FVS Turret Mechanic	20	6	0.30
52C	Utilities Equipment Repairer	6	4	0.67
52D	Power-Generation Equipment Repairer	24	5	0.21
55B	Ammunition Specialist	5	2	0.40
62B	Construction Equipment Repairer	5	1	0.20
63B	Light Wheel Vehicle Mechanic	44	21	0.48
63D	Self-Propelled Field Artillery Repairer	19	10	0.53
63E	M1 Abrams Tank System Mechanic	23	4	0.17
63G	Fuel And Electrical Sys Repairer	4	1	0.25
63H	Track Vehicle Repairer	31	5	0.16
63S	Heavy Wheel Vehicle Mechanic	33	8	0.24
63T	Bradley Fighting Vehicle System Mechanic	65	14	0.21
63W	Wheel Vehicle Repairer	30	5	0.17

(continued)

Table 19. (Continued)

MOS		Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
63Y	Track Vehicle Mechanic	11	2	0.18
67V	Observation/Scout Helicopter Repairer	1	1	1.00
76C	Equipment Records and Parts Specialist	27	3	0.11
76P	Material Control and Accounting Specialist	8	4	0.50
76Y	Unit Supply Specialist	34	12	0.35
77F	Petroleum Laboratory Specialist	57	9	0.16
77W	Water Treatment Specialist	1	1	1.00
88M	Motor Transport Operator	48	23	0.48
91B	Medical Specialist	104	12	0.11
91S	Preventive Medicine Specialist	2	1	0.50
92A	Automated Logistical Specialist	60	17	0.25
94B	Food Service Specialist	89	19	0.21
TOTALS		811	151	0.19

**Table 20. Reclassification Training Requirements Compared to
Authorized MOS SL 1 Positions for the 116 Armored Brigade**

	MOS	Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
27E	TOW/Dragon Missile Electronic Repairer	5	3	0.60
29E	Radio Repairer	7	3	0.43
39E	Special Electronic Devices Repairer	2	1	0.50
44B	Metal Worker	8	1	0.13
44E	Machinist	3	1	0.33
45B	Small Arms/Artillery Repairer	4	1	0.25
45E	M1 Abrams Tank Turret Mech	18	4	0.22
45K	Armament Repairer	19	3	0.16
45N	M60A1/A3 Tank Turret Mechanic	1	1	1.00
52C	Utilities Equipment Repairer	7	5	0.71
52D	Power-Generation Equipment Repairer	26	8	0.31
55B	Ammunition Specialist	7	1	0.14
62B	Construction Equipment Repairer	7	1	0.14
63B	Light Wheel Vehicle Mechanic	51	12	0.24
63D	Self-Propelled Field Artillery Repairer	19	10	0.53
63E	M1 Abrams Tank System Mechanic	46	11	0.24
63H	Track Vehicle Repairer	37	17	0.46
63J	QM and Chemical Equipment Repairer	10	1	0.10
63S	Heavy Wheel Vehicle Mechanic	23	4	0.17
63T	Bradley Fighting Vehicle System Mechanic	45	18	0.40
63W	Wheel Vehicle Repairer	26	3	0.12
83Y	Track Vehicle Mechanic	12	4	0.33
76C	Equipment Records and Parts Specialist	28	1	0.04
76P	Material Control and Acctg Specialist	15	4	0.27
76Y	Unit Supply Specialist	34	12	0.35
77F	Petroleum Laboratory Specialist	72	13	0.18

(continued)

Table 20. (Continued)

MOS		Number in TOE, N(TOE)	Number to retrain, N(Retrain)	N(Retrain) + N(TOE)
88M	Motor Transport Operator	89	36	0.40
91B	Medical Specialist	100	13	0.13
91P	X-Ray Specialist	1	1	1.00
91S	Preventive Medicine Specialist	2	1	0.50
92A	Automated Logistical Specialist	62	12	0.19
94B	Food Service Specialist	87	13	0.15
TOTALS		873	219	0.25

Table 21. Academic Hours in Resident Courses and RC-Configured Courses for SLI Training in Several MOSs

MOS	Resident Course (ResC)	RC-Configured Course (RCCC)			(ResC) + (RCCC)
		IDT	ADT	Total	
29E10	994	208	200	599 ^a	1.66
29J10	740	168	200	368	2.01
63B10	420	123	120	243	1.73
63E10	502	113	115.5	228.5	2.20
77F10	331	100	120	220	1.50
88M10	257	85	135	220	1.17
91B10	394	198	83	281	1.40
91S10	602	4	85	241 ^b	2.50

^a 408 hours plus 191 hours of home study.

^b Includes 152 hours of correspondence courses; 4 hours of IDT is for a proctored examination covering the correspondence study.

IV. TRAINING DEFICITS FOR SLs 2 AND ABOVE

For SLs 2 through 5 in the four brigades, Table 22 shows the number of TOE positions that are filled by personnel whose skill levels are less than required. Table 22 also shows the number of TOE positions--also for SLs 2 through 5--that are filled by personnel whose skill levels exceed those required. It is apparently a coincidence that the number of personnel (340) who are over-qualified for their jobs is about equal to the number of TOE positions (341) that are filled by personnel who are under-qualified.

Table 22. Number of Personnel Who Are Under-Qualified or Over-Qualified at Skill Levels 2 through 5

Brigade	Under-qualified ^a					Over-qualified
	1 → 2	1 → 3	2 → 3	3 → 4	4 → 5	
48 Infantry	54	1	26	15	0	117
116 Armored	59	1	25	11	0	23
155 Armored	36	0	26	12	1	126
218 Infantry	35	0	24	14	1	74
TOTALS	184	2	101	52	2	340

^a 1 → 2 notation means a SL 1 soldier fills a TOE position for an MOS SL 2; similar deficiency meanings apply to the other SL notations.

The large number of MOSs combined with four skill levels (2 through 5) and the dispersion of units within each state might not permit the brigades to improve their readiness and reduce their training load by assigning over-qualified personnel to units with skill deficits. While optimizing personnel assignments is outside the scope of this investigation, one wonders whether it is just by chance that the 116 Armored Brigade has such a favorable $96/23 = 4.2$ under-qualified/over-qualified ratio compared to $74/74 = 1.0$ for the 218 Infantry Brigade, $96/117 = 0.8$ for the 48 Infantry Brigade, and $75/126 = 0.6$ for the 155 Armored Brigade.

The aggregate deficits for the 48 and 116 Brigades in Table 22 are broken down into SL 2 deficits and SL 3 through SL 5 deficits. Tables 23 and 24 show, by MOS, SL 2 positions that are filled by SL 1 personnel. In the 48 Infantry Brigade, 20 percent of the SL 2 spaces are shown in Table 23 to be occupied by SL1 personnel. The corresponding statistic for the 116 Armored Brigade in Table 24 is 36 percent.

Tables 25 and 26 show, by MOS, SL 3 through 5 positions that are filled by personnel with lower skill levels. Table 25 shows that 16 percent of these positions in the 48 Infantry Brigade are filled by personnel who require training. And Table 26 shows that 22 percent of those filling SL 3 through 5 positions in the 116 Armored Brigade need training.

Table 23. Training Requirements for SL 2 in the 48 Infantry Brigade

	MOS	Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
27E	Tow/Dragon Missile Electronic Repairer	5	1	0.20
29N	Switching Central Repairer	1	1	1.00
29S	Communications Security Equipment Repairer	2	1	0.50
39E	Special Electronic Devices Repairer	1	1	1.00
44B	Metal Worker	2	1	0.50
45E	M1 Abrams Tank Turret Mech	4	1	0.25
45T	Bradley FVS Turret Mechanic	7	5	0.71
52C	Utilities Equipment Repairer	2	2	1.00
55B	Ammunition Specialist	1	1	1.00
63E	M1 Abrams Tank System Mechanic	13	1	0.08
63H	Track Vehicle Repairer	12	1	0.08
63S	Heavy Wheel Vehicle Mechanic	15	2	0.13
63T	Bradley Fighting Vehicle System Mechanic	35	1	0.03
63W	Wheel Vehicle Repairer	9	1	0.11
76C	Equipment Records and Parts Specialist	21	4	0.19
88M	Motor Transport Operator	47	13	0.28
91B	Medical Specialist	44	7	0.16
91C	Practical Nurse	1	1	1.00
92A	Automated Logistical Specialist	13	4	0.31
94B	Food Service Specialist	28	4	0.14
	TOTALS	263	53	0.20

Table 24. Training Requirements for SL 2 in the 116 Armored Brigade

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
39E	Special Electronic Devices Repairer	1	1	1.00
45D	Self-propelled FA Turret Mechanic	1	1	1.00
45E	M1 Abrams Tank Turret Mech	4	2	0.50
45K	Armament Repairer	5	1	0.20
60B	Light Wheel Vehicle Mechanic	21	2	0.09
63E	M1 Abrams Tank System Mechanic	13	7	0.54
63H	Track Vehicle Repairer	17	1	0.06
63T	Bradley Fighting Vehicle System Mechanic	4	4	1.00
63W	Wheel Vehicle Repairer	7	1	0.14
77F	Petroleum Laboratory Specialist	12	1	0.08
88M	Motor Transport Operator	18	8	0.00
91B	Medical Specialist	27	18	0.67
91C	Practical Nurse	1	1	1.00
91Q	Pharmacy Specialist	1	1	1.00
92A	Automated Logistical Specialist	11	4	0.36
94B	Food Service Specialist	16	4	0.25
TOTALS		159	57	0.36

**Table 25. Training Requirements for SLs 3, 4, and 5
in the 48 Infantry Brigade**

	MOS	Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
29E	Radio Repairer	2	1	0.50
55B	Ammunition Specialist	2	1	0.50
63B	Light Wheel Vehicle Mechanic	21	1	0.10
63H	Track Vehicle Repairer	19	3	0.16
63T	Bradley Fighting Vehicle System Mechanic	30	6	0.20
76P	Material Control and Accounting Specialist	10	1	0.10
76V	Material Storage and Handling Specialist	4	1	0.25
76Y	Unit Supply Specialist	44	1	0.02
77F	Petroleum Laboratory Specialist	7	1	0.34
88M	Motor Transport Operator	32	11	0.28
91B	Medical Specialist	17	1	0.06
92A	Automated Logistical Specialist	15	1	0.07
94B	Food Service Specialist	40	11	0.28
	TOTALS	243	40	0.16

**Table 26. Training Requirements for SLs 3, 4, and 5
in the 116 Armored Brigade**

MOS		Number in TOE, N(TOE)	Number to Train, N(Train)	N(Train) + N(TOE)
29E	Radio Repairer	2	1	0.50
39E	Special Electronic Devices Repairer	1	1	1.00
52D	Power-Generation Equipment Repairer	3	1	0.33
55B	Ammunition Specialist	3	1	0.33
63B	Light Wheel Vehicle Mechanic	15	2	0.13
63D	Self-Propelled Field Artillery Repairer	10	2	0.20
63E	M1 Abrams Tank System Mechanic	12	4	0.33
63H	Track Vehicle Repairer	22	2	0.09
77F	Petroleum Laboratory Specialist	5	1	0.20
88M	Motor Transport Operator	15	4	0.27
91B	Medical Specialist	12	5	0.42
92A	Automated Logistical Specialist	47	3	0.06
94B	Food Service Specialist	19	9	0.47
TOTALS		166	36	0.22

V. FINDINGS

- Mid-1993 shortages of qualified personnel by MOS are identified for the 48 and 116 Brigades in Tables 4 and 5, respectively. The shortages are shown for grade levels E3-E4, which are equivalent to SLI, and for grade levels E5-E8, which correspond to SLS 2 through 5.

- The curricula (in content and length) and standards in AIT are the same for ARNG personnel as they are for active Army personnel.

- Resident courses at proponent schools, which are attended by nonprior-service personnel in the RCs as well as by new recruits in the active Army, provide training in almost all critical tasks. In a 21-MOS sample, only 5 percent of 769 technical tasks were left for the units to teach. The tasks not taught in the resident courses are related to obsolete equipment or involve knowledge transfer from similar tasks that are taught in AIT.

- Reclassification training for prior service personnel, who fill MOS positions for which they are not qualified, appears most in need of reinforcement by some form of supplementary training. Because of employment commitments, prior service personnel are usually unable to attend resident courses in AIT. Although reclassification trainees should be the principal beneficiaries of supplementary training, the courseware developed for them could also be used to extend AIT for nonprior service personnel and/or to provide sustainment training for all SL 1 personnel.

APPENDIX

UNIT ALLOCATIONS

(Source: Ref. 4)

Brigade	State	Page
48 Infantry	GA	A-3
116 Armored	ID/OR	A-5
155 Armored	MS	A-9
218 Infantry	SC	A-11

ARMING ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US BR LEV RS DESCRIPTION	HOME LOCATION	ST	MTOS/TSA	FEDREC DATE	STRUCTURED STRENGTH OFF WO ENL AGG	AUTHORIZED STRENGTH OFF WO ENL AGG
04024	WVBLFF	0048	IN BDE MECH	MACON	2GA			0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 05	WVBNH1	0048	EN CO DET 1	STATESBORO MUNI	2GA		170647	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 05	WVBNH2	0048	EN CO DET 2	BAXLEY	2GA		280656	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 05	WVBNH3	0048	EN CO DET 3	WAYCROSS	2GA		041246	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 05	WVBNH4	0048	EN CO	DOUGLAS	2GA	05147JNG030188	221148	6 0 156 162	6 0 156 162
04024 06	WVBL99	0048	IN HMC BDE AUG TDA	MACON	2GA	WVBL990193		0 1 1 2 0 0 1 1	0 1 1 2 0 0 1 1
04024 06	WVBLA1	0048	IN HMC BDE DET 1	MAKINSVILLE	2GA		111147	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 06	WVBLA4	0048	IN HMC BDE MECH	MACON	2GA	87102LNG100293	121246	46 4 275 325	46 4 275 325
04024 07	WVBP11	0348	AR TRP TRP E DET 1 CAV	NEUMAN	2GA		030549	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 07	WVBPAA	0348	AR TRP TRP E CAV	GRIFFIN	2GA	17387LNG130193	160248	5 0 153 158	5 0 153 158
04024 14	WV399	0118	FA BN 01 155 SP AUG TDA	WAYCROSS	2GA	NGWV3990190	300982	0 0 10 10 0 0 0 0	0 0 10 10 0 0 0 0
04024 14	WV3A0	0118	FA BN 01 BTY A 155 SP	SPRINGFIELD	2GA		220348	5 0 121 126	5 0 121 126
04024 14	WV3B0	0118	FA BN 01 BTY B 155 SP	SAVANNAH	2GA		180647	5 0 121 126	5 0 121 126
04024 14	WV3C0	0118	FA BN 01 BTY C 155 SP	SAVANNAH	2GA		180647	5 0 121 126	5 0 121 126
04024 14	WV3C1	0118	FA BN 01 BTY C DET 1	JESUP	2GA		240456	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 14	WV3S0	0118	FA BN 01 SVC BTY 155 SP	BRUNSWICK	2GA		031246	2 1 105 108	2 1 105 108
04024 14	WV3T0	0118	FA BN 01 HMB 155 SP	SAVANNAH	2GA		210447	35 1 232 268	35 1 232 268
04024 14	WV3T1	0118	FA BN 01 HMB DET 1	MACON	2GA		300982	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 14	WV3AA	0118	FA BN 01 155 SP	SAVANNAH	2GA	06375LNG100293		52 2 700 754	52 2 700 754
04024 35	WVBN99	0148	CS BN FUD SPT AUG TDA	FORSTH	2GA	NGWVBN990192	141055	0 0 5 5 0 0 0 0	0 0 5 5 0 0 0 0
04024 35	WVBNH0	0148	CS BN CO A SET	DUBLIN	2GA		281149	4 1 161 166	4 1 161 166
04024 35	WVBNH1	0148	CS BN CO B MAINT	HINESVILLE	2GA		160647	4 6 286 296	4 6 286 296
04024 35	WVBNH2	0148	CS BN CO B DET 1	GLENNVILLE	2GA		300556	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
04024 35	WVBNH3	0148	CS BN CO C REG	MACON	2GA		010148	17 0 100 117	17 0 100 117
04024 35	WVBNH4	0148	CS BN HMC	FORSTH	2GA		080747	18 14 119 151	18 14 119 151
04024 35	WVBNH5	0148	CS BN FUD SPT	FORSTH	2GA	63085LNG100193		43 21 666 730	43 21 666 730
04024 40	WVCP99	0108	AR BN 01 AUG TDA	CALHOUN	2GA	NGWVCP990191	150348	0 0 10 10 0 0 0 0	0 0 10 10 0 0 0 0
04024 40	WVCPA0	0108	AR BN 01 CO A TANK	ROME	2GA		191147	5 0 57 62	5 0 57 62
04024 40	WVCPA3	0108	AR BN 01 CO B TANK	CEDARTOWN	2GA		131147	5 0 57 62	5 0 57 62

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US BR LEV R3	DESCRIPTION	HOME LOCATION	ST	NTOE/TDA	FEBREC DATE	STRUCTURED STRENGTH OFF WO EML AGG	AUTHORIZED STRENGTH OFF WO EML AGG
04024 40	UPC200	0108 AR BN	01	CO C TANK	DALTON	2GA		140148	5 0 57 62	5 0 57 62
04024 40	UPC200	0108 AR BN	01	CO B TANK	CANTON	2GA		191247	5 0 57 62	5 0 57 62
04024 40	UPC210	0108 AR BN	01	HMC TANK	CALHOUN	2GA		150947	21 1 309 331	21 1 309 331
04024 40	UPC211	0108 AR BN	01	HMC TANK DET 1	DOUGLASVILLE	2GA		150348	0 0 0 0	0 0 0 0
04024 40	UPC24A	0108 AR BN	01	TANK	CALHOUN	2GA	17375LWG030193		41 1 537 579	41 1 537 579
04024 41	WZG0AA	0024 IN DET		REAR CP OP CELL	FT STEUART	2GA	87103LWG020192	310348	7 0 12 19	7 0 12 19
04024 42	UPB199	0121 IN BN	01	MECH AUG TDA	DUBLIN	2GA	MGUPB1990190	121147	0 0 10 10	0 0 10 10
04024 42	UPB1A0	0121 IN BN	01	CO A MECH	COVINGTON	2GA		260248	5 0 104 109	5 0 104 109
04024 42	UPB1B0	0121 IN BN	01	CO B MECH	THORASTON	2GA		011247	5 0 104 109	5 0 104 109
04024 42	UPB1B1	0121 IN BN	01	CO B DET 1	WINNER	2GA		011080	0 0 0 0	0 0 0 0
04024 42	UPB1C0	0121 IN BN	01	CO C MECH	GAINESVILLE	2GA		310348	5 0 104 109	5 0 104 109
04024 42	UPB1D0	0121 IN BN	01	CO D MECH	LAURENCEVILLE	2GA		081292	5 0 104 109	5 0 104 109
04024 42	UPB1E0	0121 IN BN	01	CO E ANTIARMOR	EATONTON	2GA		310348	5 0 55 60	5 0 55 60
04024 42	UPB1F0	0121 IN BN	01	HMC MECH	WINNER	2GA		271146	21 1 308 330	21 1 308 330
04024 42	UPB1T1	0121 IN BN	01	HMC MECH DET 1	MILLEDGEVILLE	2GA		121147	0 0 0 0	0 0 0 0
04024 42	UPB1A1A	0121 IN BN	01	MECH	DUBLIN	2GA	07245LWG405093		46 1 779 826	46 1 779 826
04024 42	UPB1B99	0121 IN BN	02	MECH AUG TDA	ALBANY	2GA	MGUPB1B990190	250656	0 0 10 10	0 0 10 10
04024 42	UPB1B40	0121 IN BN	02	CO A MECH	VALPOSTA	2GA		261146	5 0 104 109	5 0 104 109
04024 42	UPB1B40	0121 IN BN	02	CO S MECH	CORDELE	2GA		221146	5 0 104 109	5 0 104 109
04024 42	UPB1B61	0121 IN BN	02	CO B MECH DET 1	MOULTRIE	2GA		270449	0 0 0 0	0 0 0 0
04024 42	UPB1C0	0121 IN BN	02	CO C MECH	AMERICUS	2GA		270148	5 0 104 109	5 0 104 109
04024 42	UPB1D00	0121 IN BN	02	CO D MECH	EASTMAN	2GA		230148	5 0 104 109	5 0 104 109
04024 42	UPB1B61	0121 IN BN	02	CO B DET 1	PERRY	2GA		110249	0 0 0 0	0 0 0 0
04024 42	UPB1E0	0121 IN BN	02	CO E ANTIARMOR	FITZGERALD	2GA		080349	5 0 55 60	5 0 55 60
04024 42	UPB1B70	0121 IN BN	02	HMC MECH	ALBANY	2GA		251146	21 1 308 330	21 1 308 330
04024 42	UPB1B71	0121 IN BN	02	HMC MECH DET 1	TIFTON	2GA		250656	0 0 0 0	0 0 0 0
04024 42	UPB1B1A	0121 IN BN	02	MECH	ALBANY	2GA	07245LWG405093		46 1 779 826	46 1 779 826
TOTALS FOR TPSN: 04024									292 31 4103 4426	292 31 4103 4426

ARMY ORGANIZATION MASTER - STATE/TPSM SEQUENCE

TPSM/EL	UIC	UNIT NO	PAR US BR LEV RS DESCRIPTION	MORSE LOCATION	ST	NTOE/TDA	FEOREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
								OFF	WO	ENL	AGG	OFF	WO	ENL	AGG
04004	WTLHFF	0116	AR BDE CAV	BOISE	610			0	0	0	0	0	0	0	0
04004	WTD190	0004	IN HMC AUG CARRIER	BOISE	610			0	0	0	0	0	0	0	0
04004	WPO6AG	0116	EN BM CO A	COEUR D ALENE	610		180447	5	0	98	103	5	0	98	103
04004	WPO6B0	0116	EN BM CO B	MOSCOW	610		091047	5	0	98	103	5	0	98	103
04004	WPO6B1	0116	EN BM CO B DET 1	OROFINO	610		010277	0	0	0	0	0	0	0	0
04004	WPO6B2	0116	EN BM CO B DET 2	GRANDEVILLE	610		010277	0	0	0	0	0	0	0	0
04004	WPO6C0	0116	EN BM CO C	POST FALLS	610		180447	5	0	98	103	5	0	98	103
04004	WPO6C1	0116	EN BM CO C DET 1	BORNHRS FERRY	610		060154	0	0	0	0	0	0	0	0
04004	WPO6D0	0116	EN BM HMC	LEVISTON	610		180447	10	1	116	127	10	1	116	127
04004	WPO6AA	0116	EN BM	LEVISTON	610	05335LNG010193		25	1	410	436	25	1	410	436
04004	WTLH99	0116	AR HMC BDE AUG TDA	BOISE	610	NGUYLH990190	190547	0	1	1	2	0	1	1	2
04004	WTLHAA	0116	AR HMC BDE CAV	BOISE	610	87102LNG080190	190547	46	4	236	286	46	4	236	286
04004	WYLEA0	0148	FA BM 01 BTRY A	PRESTON	610		020356	5	0	110	115	5	0	110	115
04004	WYLEA1	0148	FA BM 01 BTRY A DET 1	POCATELLO	610		000000	0	0	0	0	0	0	0	0
04004	WYLEB0	0148	FA BM 01 BTRY B	BLACKFOOT	610		230947	5	0	110	115	5	0	110	115
04004	WYLEB1	0148	FA BM 01 BTRY B DET 1	RIGBY	610		240747	0	0	0	0	0	0	0	0
04004	WYLEC0	0148	FA BM 01 BTRY C	REXBURG	610		280349	5	0	110	115	5	0	110	115
04004	WYLEC1	0148	FA BM 01 BTRY C DET 1	ST ANTHONY	610		220947	0	0	0	0	0	0	0	0
04004	WYLES0	0148	FA BM 01 SVC BTRY	IDAHO FALLS	610		000000	2	1	86	89	2	1	86	89
04004	WYLES1	0148	FA BM 01 SVC BTRY DET 1	POCATELLO	610		190647	0	0	0	0	0	0	0	0
04004	WYLET0	0148	FA BM 01 HMB	POCATELLO	610		190647	27	1	146	174	27	1	146	174
04004	WYLEA4	0148	FA BM 01 155 SP	POCATELLO	610	04365LNG150193		44	2	562	608	44	2	562	608
04004	WTD297	0145	CS BM AUG TDA	CALDWELL	610	WTD2970190	080147	0	0	5	5	0	0	5	5
04004	WTD299	0145	CS BM RATES AUG	GOWEN FIELD	610			0	0	0	0	0	0	0	0
04004	WTD2A0	0145	CS BM CO A SBT	NAMPA	610		200547	4	1	164	169	4	1	164	169
04004	WTD2A1	0145	CS BM CO A SBT DET 1	PAYETTE	610		070447	0	0	0	0	0	0	0	0
04004	WTD2A2	0145	CS BM CO A SBT DET 2	HOMEBALE	610		060751	0	0	0	0	0	0	0	0
04004	WTD2B0	0145	CS BM CO B HAIN?	BOISE	610		280989	4	6	295	305	4	6	295	305
04004	WTD2B1	0145	CS BM CO B DET 1	JEROME	610		210891	0	0	0	0	0	0	0	0
04004	WTD2B2	0145	CS BM CO B DET 2	MOUNTAIN HOME	610		060147	0	0	0	0	0	0	0	0

ARMG ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US	DESCRIPTION	HOME LOCATION	ST	MTDE/TDA	FEBREC DATE	STRUCTURED STRENGTH OFF WO ENL AGG	AUTHORIZED STRENGTH OFF WO ENL AGG
04004 35	WT02CD	0145	CS BN	CO C MED	BOISE	610		020675	17 0 94 111	17 0 94 111
04004 35	WT02TD	0145	CS BN	MHC	CALDWELL	610		080147	18 8 117 143	18 8 117 143
04004 35	WT02AA	0145	CS BN		CALDWELL	610	63085LNG030191		43 15 670 728	43 15 670 728
04004 40	WTP399	0116	AR BN	O2 AUG	TWIN FALLS	610	NGWVP3990190	100147	0 0 10 10	0 0 10 10
04004 40	WTP3A0	0116	AR BN	O2 CO A	ENHETT	610		070851	5 0 57 62	5 0 57 62
04004 40	WTP3B0	0116	AR BN	O2 CO B	BURLEY	610		060547	5 0 57 62	5 0 57 62
04004 40	WTP3C0	0116	AR BN	O2 CO C	RUPERT	610		200647	5 0 57 62	5 0 57 62
04004 40	WTP3D0	0116	AR BN	O2 CO D	GOODING	610		060647	5 0 57 62	5 0 57 62
04004 40	WTP3D1	0116	AR BN	O2 CO D BET 1	JEROME	610		070547	0 0 0 0	0 0 0 0
04004 40	WTP3T0	0116	AR BN	O2 MHC	TWIN FALLS	610		100147	21 1 297 319	21 1 297 319
04004 40	WTP3T1	0116	AR BN	O2 MHC BET 1	BUHL	610		220547	0 0 0 0	0 0 0 0
04004 40	WTP3T2	0116	AR BN	O2 MHC BET 2	HAILEY	610		011249	0 0 0 0	0 0 0 0
04004 40	WTP3AA	0116	AR BN	O2 CAV	TWIN FALLS	610	17375LNG230193		41 1 525 567	41 1 525 567
04004 41	WZGMAA	0004	IN BET	REAR CP OP CELL	BOISE	610	87103LNG030192	000000	7 0 12 19	7 0 12 19
TOTALS FOR TPSN: 04004									206 24 2431 2661	206 24 2431 2661

ARMED ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US BR LEV RS DESCRIPTION	HOME LOCATION	ST	MTOE/TDA	FEDREC DATE	STRUCTURED STRENGTH OFF WO ENL AGG	AUTHORIZED STRENGTH OFF WO ENL AGG
04004 07	WULEAA	0116 AR TRP	TRP E CAV	WOODBURN	60R	17387LNG120190	030747	6 0 146 152	6 0 146 152
04004 14	WYLET1	0148 FA BN	01 HMB DET 1	BURNS	60R		130549	3 0 26 29	3 0 26 29
04004 14	WYLET2	0148 FA BN	01 HMB DET 2	ONTARIO	60R		160348	5 0 15 20	5 0 15 20
04004 35	WTO2T1	0145 CS C	HMC DET 1	CLACKANAS	60R		070290	0 1 3 4	0 1 3 4
04004 40	WOUT99	0116 AR BN	03 HMC CAV AUG TDA	LA GRANDE	60R	NGH0U1990190	230647	0 0 10 10	0 0 10 10
04004 40	WOUTA0	0116 AR BN	03 CO A	BAKER	60R		170947	5 0 57 62	5 0 57 62
04004 40	WOUTB0	0116 AR BN	03 CO B	HERMISTON	60R		160290	5 0 57 62	5 0 57 62
04004 40	WOUTC0	0116 AR BN	03 CO C	MILTON-FREEWATER	60R		030347	5 0 57 62	5 0 57 62
04004 40	WOUTD0	0116 AR BN	03 CO D	ONTARIO	60R		160848	5 0 57 62	5 0 57 62
04004 40	WOUTT0	0116 AR BN	03 HMC CAV	LA GRANDE	60R		230647	21 1 297 319	21 1 297 319
04004 40	WOUTT1	0116 AR BN	03 HMC CAV DET 1	PENPLETON	60R		010348	0 0 0 0	0 0 0 0
04004 40	WOUTAA	0116 AR BN	03 CAVALRY	LA GRANDE	60R	17375LNG230193		41 1 525 567	41 1 525 567
04004 42	WYLE99	0082 IN BN	01 HMC AUG TDA	BEND	60R	NGVTLG990189	270248	0 0 10 10	0 0 10 10
04004 42	WYLEA0	0082 IN BN	01 CO A	LEBANON	60R		101247	5 0 107 112	5 0 107 112
04004 42	WYLEB0	0082 IN BN	01 CO B	KLAMATH FALLS	60R		120290	5 0 107 112	5 0 107 112
04004 42	WYLEC0	0082 IN BN	01 CO C	SALEM	60R		150547	5 0 107 112	5 0 107 112
04004 42	WYLED0	0082 IN BN	01 CO D	REDMOND	60R		100151	5 0 107 112	5 0 107 112
04004 42	WYLEE0	0082 IN BN	01 CO E	THE BALLS	60R		090848	5 0 60 65	5 0 60 65
04004 42	WYLEF0	0082 IN BN	01 HMC	BEND	60R		270248	20 2 279 301	20 2 279 301
04004 42	WYLEG1	0082 IN BN	01 HMC DET 1	BURNS	60R		130549	0 0 0 0	0 0 0 0
04004 42	WYLEGA	0082 IN BN	01 CAVALRY	BEND	60R	07245LNG121092		45 2 767 814	45 2 767 814
TOTALS FOR TPSN: 04004								100 4 1502 1606	100 4 1502 1606

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UTC	UNIT NO	PAR US BR LEV RS DESCRIPTION	MOHE LOCATION	ST	HTOE/TDA	FEDREC DATE	STRUCTURED STRENGTH OFF WO ENL AGG	AUTHORIZED STRENGTH OFF WO ENL AGG
00001	WTRAFF	0155	AR BDE	TUPELO	2MS			0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 05	WTRBA1	0134	EM CO DET 1	UNION	2MS		010856	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 05	WTRBAA	0134	EN CO	CARTHAGE	2MS	05147LWGO10194	211155	6 0 161 167	6 0 161 167
00001 06	WTRAP9	0155	AR HHC BDE AUG TDA	TUPELO	2MS	MGVTHA990191	120451	0 1 1 2 0 1 1 2	0 1 1 2 0 1 1 2
00001 06	WTRAAA	0155	AR HHC BDE	TUPELO	2MS	87102LWGO10293	120451	46 4 275 325	46 4 275 325
00001 07	WTRCAA	0098	AR TRP TRP A CAV	LOUISVILLE	2MS	17387LWGO10193	110447	5 0 153 158	5 0 153 158
00001 14	WPKD99	0114	FA BN Q2 AUG TDA	STARKVILLE	2MS	MGUPKO990193	171246	0 0 14 14	0 0 14 14
00001 14	WPKDAO	0114	FA BN Q2 BTY A 155 SP	COLUMBUS	2MS		161052	5 0 121 126	5 0 121 126
00001 14	WPKDBO	0114	FA BN Q2 BTY B 155 SP	ACREMAN	2MS		070356	5 0 121 126	5 0 121 126
00001 14	WPKDB1	0114	FA BN Q2 BTY B DET 1	EUPORA	2MS		171152	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 14	WPKDCO	0114	FA BN Q2 BTY C 155 SP	DURANT	2MS		250254	5 0 121 126	5 0 121 126
00001 14	WPKDC1	0114	FA BN Q2 BTY C DET 1	LEXINGTON	2MS		111246	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 14	WPKDSO	0114	FA BN Q2 SVC BTY 155 SP	KOSCIUSKO	2MS		220948	2 1 105 108	2 1 105 108
00001 14	WPKDIO	0114	FA BN Q2 HIB 155 SP	STARKVILLE	2MS		171246	36 1 208 245	36 1 208 245
00001 14	WPKDAA	0114	FA BN Q2 155 SP	STARKVILLE	2MS	06375LWGO90293		53 2 676 731	53 2 676 731
00001 35	WTMB01	0106	CS BN USAR EQ CONSTR	CP CHELBY	2MS			0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 35	WTMB97	0106	CS BN FUD SPT AUG TDA	MONTICELLO	2MS	MGVTHB970190	250150	0 0 5 5	0 0 5 5
00001 35	WTMB99	0106	CS BN AUG MATES	CP SHELBY	2MS			0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 35	WTMBAA	0106	CS BN CO A S B T	MAGEE	2MS		300751	4 1 164 169	4 1 164 169
00001 35	WTMBB1	0106	CS BN CO A SBT DET 1	PRENTISS	2MS		211155	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 35	WTMBB0	0106	CS BN CO B MAINT	CP SHELBY	2MS		021153	4 6 296 306	4 6 296 306
00001 35	WTMBB1	0106	CS BN CO B DET 1	TAYLORSVILLE	2MS		121054	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 35	WTMBB2	0106	CS BN CO B DET 2	MONTICELLO	2MS		000000	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 35	WTMBB3	0106	CS BN CO B DET 3	CP MCCAIN	2MS		000000	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 35	WTMBB0	0106	CS BN CO C HED	MATLEMURST	2MS		090249	17 0 94 111	17 0 94 111
00001 35	WTMBIO	0106	CS BN HHC	MONTICELLO	2MS		250150	18 9 121 148	18 9 121 148
00001 35	WTMBAA	0106	CS BN FUD SPT	MONTICELLO	2MS	63065LWGO90194		43 16 675 734	43 16 675 734
00001 40	WPKD98	0198	AR BN 01 TANK AUG TDA	AMORY	2MS			0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
00001 40	WPKD99	0198	AR BN 01 TANK AUG TDA	AMORY	2MS	MGVTHB990189	070247	0 0 9 9	0 0 9 9

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US BR LEV RS DESCRIPTION	HOME LOCATION	ST	MTDE/TDA	PERREC DATE	STRUCTURED STRENGTH			AUTHORIZED STRENGTH				
								OFF	WO	EHL	AGG	OFF	WO	EHL	AGG
00001 40	WPKQAO	0198 AR BN	01 CO A TANK	BALDWIN	2MS		281555	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	01 CO B TANK	BOONEVILLE	2MS		040647	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	01 CO C TANK	LUKA	2MS		160947	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	01 CO D TANK	NETTLETON	2MS		021255	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	01 HHC TANK	AMORY	2MS		070247	21	1	309	331	21	1	309	331
	WPKQAO	0198 AR BN	01 HHC DET 1	FULTON	2MS		160751	0	0	0	0	0	0	0	0
	WPKQAO	0198 AR BN	01 TANK	AMORY	2MS	17375LNG030193		41	1	537	579	41	1	537	579
	WPKQAO	0198 AR BN	02 TANK AUG TDA	GREENVILLE	2MS		021246	0	0	9	9	0	0	9	9
00001 40	WPKQAO	0198 AR BN	02 CO A TANK	MOOREHEAD	2MS		271048	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	02 CO B TANK	INDIANOLA	2MS		100447	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	02 CO C TANK	CLEVELAND	2MS		280547	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	02 CO D TANK	RALLING FORK	2MS		220556	5	0	57	62	5	0	57	62
	WPKQAO	0198 AR BN	02 HHC TANK	GREENVILLE	2MS		021246	21	1	309	331	21	1	309	331
	WPKQAO	0198 AR BN	02 HHC DET 1	LELAND	2MS		250456	0	0	0	0	0	0	0	0
	WPKQAO	0198 AR BN	02 TANK	GREENVILLE	2MS	17375LNG030193		41	1	537	579	41	1	537	579
	WPKQAO	0021 AR DET	REAR CP OP CCLL	TUPELO	2MS	87103LNG030192	000000	7	0	12	19	7	0	12	19
00001 42	WPKL99	0155 IN BN	01 AUG TDA	MCOMB	2MS		120847	0	0	13	13	0	0	13	13
	WPKL99	0155 IN BN	01 CO A MECH	TYLER TOWN	2MS		300547	5	0	102	107	5	0	102	107
	WPKL99	0155 IN BN	01 CO B MECH	KATCHEZ	2MS		260847	5	0	102	107	5	0	102	107
	WPKL99	0155 IN BN	01 CO C MECH	WENDENHALL	2MS		211254	5	0	102	107	5	0	102	107
	WPKL99	0155 IN BN	01 CO D MECH	GLOSTER	2MS		011177	5	0	102	107	5	0	102	107
	WPKL99	0155 IN BN	01 CO E ANTIARMOR	MACMOLIA	2MS		141255	5	0	60	65	5	0	60	65
	WPKL99	0155 IN BN	01 HHC MECH	MCOMB	2MS		120847	21	1	308	330	21	1	308	330
	WPKL99	0155 IN BN	01 HHC DET 1	HEADVILLE	2MS		030747	0	0	0	0	0	0	0	0
00001 42	WPKL99	0155 IN BN	01 HHC DET 2	BROOKHAVEN	2MS		280449	0	0	0	0	0	0	0	0
	WPKL99	0155 IN BN	01 HHC DET 3	PORT ELMON	2MS		101156	0	0	0	0	0	0	0	0
	WPKL99	0155 IN BN	01 MECH	MCOMB	2MS	07265LNG040093		46	1	776	823	46	1	776	823
TOTALS FOR TPSN: 00001								288	26	3853	4167	288	26	3853	4167

LEARNING ORGANIZATION MASTER - STATE/TPSN SEQUENCE

Q4001	WVBOFF	Q218 IN BDE	MECH	NEWBERRY	ZSC	0	0	0	0	0	0	0	0	0	0
Q4001 Q3	WVBJ90	Q001 IN HMC	AUG CARRIER	NEWBERRY	ZSC	0	0	0	0	0	0	0	0	0	0
Q4001 Q5	WV73AA	Q125 EN CO	SEP BDE	SAVINGVILLE	ZSC	05143LHG060192	100247	7	1	201	209	7	1	201	209
Q4001 Q5	WVBO98	Q218 IN HMC	BDE AUG TDA	NEWBERRY	ZSC	NGVUB0900190	040152	0	1	1	2	0	1	1	2
Q4001 Q6	WVBOAA	Q218 IN HMC	BDE	NEWBERRY	ZSC	87102LHG050192	050347	46	4	236	286	46	4	236	286
Q4001 Q7	WVBRAY	Q202 AR TRP	TRP @ DET 1	RIDGELAND	ZSC		251147	0	0	0	0	0	0	0	0
Q4001 Q7	WVBRJA	Q202 AR TRP	TRP @ CAV	BEAUFORT MCAS	ZSC	17387LHG040290	110347	6	0	146	152	6	0	146	152
Q4001 14	WV3S99	Q178 FA BN	Q1 155 SP AUG TDA	GREER	ZSC	MGUP33990190	180247	0	0	10	10	0	0	10	10
Q4001 14	WV3SAD	Q178 FA BN	Q1 BTY A 155 SP	LYMAN	ZSC		130247	3	0	79	82	3	0	79	82
Q4001 14	WV3SBO	Q178 FA BN	Q1 BTY B 155 SP	FACOLET HILLS	ZSC		030247	3	0	79	82	3	0	79	82
Q4001 14	WV3SXC	Q178 FA BN	Q1 BTY C 155 SP	HANNING	ZSC		310848	3	0	79	82	3	0	79	82
Q4001 14	WV3S80	Q178 FA BN	Q1 SVC BTY 155 SP	INMAN	ZSC		010459	2	1	133	136	2	1	133	136
Q4001 14	WV3S91	Q178 FA BN	Q1 SVC BTY DET 1	HEMINGWAY	ZSC		060347	0	0	0	0	0	0	0	0
Q4001 14	WV3STD	Q178 FA BN	Q1 HWB 155 SP	GREER	ZSC		180247	24	1	192	227	34	1	192	227
Q4001 14	WV3SAA	Q178 FA BN	Q1 155 SP	GREER	ZSC	06365LHG110292	180247	45	2	562	609	45	2	562	609
Q4001 35	WVBT99	Q163 CS BN	AUG TDA	HARPTON	ZSC	NGVBT1990190	140247	0	0	5	5	0	0	5	5
Q4001 35	WVBTAD	Q163 CS BN	CO A 5 & T	BAHNBURG	ZSC		140547	4	1	161	166	4	1	161	166
Q4001 35	WVBT80	Q163 CS BN	CO B MAINT	ORANGERBURG	ZSC		300347	4	6	286	296	4	6	286	296
Q4001 35	WVBTCD	Q163 CS BN	CO C MED	DARLINGTON	ZSC		190247	13	4	100	117	13	4	100	117

ARMY ORGANIZATION MASTER - STATE/TPSN SEQUENCE

TPSN/EL	UIC	UNIT NO	PAR US DR LEV RS	DESCRIPTION	HOME LOCATION	ST	MTDE/TDA	FEDREC DATE	STRUCTURED STRENGTH OFF WO ENL AGG	AUTHORIZED STRENGTH OFF WO ENL AGG
04001 35	W8710	0163 CS BN	MHC		HAMPTON	25C		140247	18 14 119 151	18 14 119 151
04001 35	W8710	0163 CS BN	BDE SPT		HAMPTON	25C	6308SLNG070292		39 23 666 730	39 25 666 730
04001 40	W8710	0263 AR BN	O2 AUG TDA		ROCK HILL	25C	M54PV7990190	070247	0 0 10 10	0 0 10 10
04001 40	W8710	0263 AR BN	O2 CO A TANK		GAFFNEY	25C		300649	5 0 57 62	5 0 57 62
04001 40	W8710	0263 AR BN	O2 CO B TANK		FT RILL	25C		200247	5 0 57 62	5 0 57 62
04001 40	W8710	0263 AR BN	O2 CO C TANK		CLOVER	25C		010749	5 0 57 62	5 0 57 62
04001 40	W8710	0263 AR BN	O2 CO D TANK		YORK	25C		250447	5 0 57 62	5 0 57 62
04001 40	W8710	0263 AR BN	O2 MHC TANK		ROCK HILL	25C		070247	21 1 297 319	21 1 297 319
04001 40	W8710	0263 AR BN	O2 TANK		ROCK HILL	25C	17375LNG190293		41 1 525 567	41 1 525 567
04001 42	W8710	0118 IN BN	O1 MECH AUG TDA		MT PLEASANT	25C	M6VPSK990190	110247	0 0 10 10	0 0 10 10
04001 42	W8710	0118 IN BN	O1 CO A MECH		CHARLESTON	25C		100247	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O1 CO B MECH		SUMMERVILLE	25C		140347	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O1 CO C MECH		WALTERBORO	25C		120247	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O1 CO D MECH		MORRIS CORNER	25C		070347	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O1 CO E ANTIARMOR		ST GEORGE	25C		011078	5 0 55 60	5 0 55 60
04001 42	W8710	0118 IN BN	O1 MHC MECH		MT PLEASANT	25C		110247	21 1 308 330	21 1 308 330
04001 42	W8710	0118 IN BN	O1 MHC DET 1		MT CHARLESTON	25C		110247	0 0 0 0	0 0 0 0
04001 42	W8710	0118 IN BN	O1 MECH		MT PLEASANT	25C	07265LNG332093		46 1 779 826	46 1 779 826
04001 42	W8710	0118 IN BN	O4 MECH AUG TDA		UNION	25C	M6VPSK990190		0 0 10 10	0 0 10 10
04001 42	W8710	0118 IN BN	O4 CO A MECH		WINTERBORO	25C		290447	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O4 CO B MECH		CHESTER	25C		040347	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O4 CO C MECH		JONESVILLE	25C		050247	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O4 CO D MECH		WHITTHIRE	25C		130148	5 0 104 109	5 0 104 109
04001 42	W8710	0118 IN BN	O4 CO E ANTIARMOR		GAFFNEY	25C		100447	5 0 55 60	5 0 55 60
04001 42	W8710	0118 IN BN	O4 MHC MECH		UNION	25C		040247	21 1 308 330	21 1 308 330
04001 42	W8710	0118 IN BN	O4 MHC DET 1		WOODRUFF	25C		040247	0 0 0 0	0 0 0 0
04001 42	W8710	0118 IN BN	O4 MHC DET 2		LOCKHART	25C		210347	0 0 0 0	0 0 0 0
04001 42	W8710	0118 IN BN	O4 MECH		UNION	25C	07265LNG332093		46 1 779 826	46 1 779 826

TOTALS FOR TFSH: 04001

276 36 3940 4252 276 36 3940 4252

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13. ABSTRACT (Maximum 180 words) <p>This study concerns two ARNG brigades that are scheduled to rotate to the National Test Center (NTC) in three years. The purpose of the study is to identify Combat Service Support (CSS) military occupational specialties (MOSSs) that would be expected to benefit most by some form of individual training that would supplement training given to ARNG personnel by current training curricula; additional technical training for unskilled personnel is a particular concern. Measuring the benefits of the supplementary training is still uncertain; the benefits might be determined by measurements at the NTC, and/or compared with the training state of other units that do not receive supplementary training. Training requirements, by MOS, are developed for zero-skill-level personnel in a control group of two brigades whose missions and personnel strengths are comparable to those of the test brigades. Besides identifying training requirements for zero-skill-level personnel, with and without prior service, the training needs for non-zero-skill-level personnel, with and without prior service, the training needs for non-zero-skill-level personnel, who occupy positions requiring higher skill levels, are also identified.</p>				
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